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ARMY TROOP SUPPORT AND AVIATION MATERIEL READINESS CO--ETC F/6 5/3
HISTORICAL INFLATION PROGRAM. (A COMPUTER PROGRAM GENERATING HI--ETC(U)
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	REPORT DOCUMENTATION	READ INSTRUCTIONS BEFORE COMPLETING FORM	
	1. REPORT NUMBER TSARCOM Technical Report 80-1	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
	4. TITLE (and Subtitie)		5. TYPE OF REPORT & PERIOD COVERED
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(6)	(A Computer Program Generating Hist Inflation Indices for Army Aircraft	orical	(1) Final Peplis
	Intraction indices for Army Affectate	revision,	6. PERFORMING ORG. REPORT NUMBER
	7. AUTHOR(a)		B. CONTRACT OR GRANT NUMBER(a)
(10)	Warren H. Gille, Jr		
	9. PERFORMING ORGANIZATION NAME AND ADDRESS US Army Troop Support & Aviation Ma Command, Office of the Comptroller, Division, Components & Operational 4300 Goodfellow Blvd, St. Louis, MO	teriel Readiness Cost Analysis Studies Branch 63120	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
	11. CONTROLLING OFFICE NAME AND ADDRESS	(II	January 80
	•		13. NUMBER OF PAGES -
	14. MONITORING AGENCY NAME & ADDRESS(II different	from Controlling Office)	77 pages 15. SECURITY CLASS. (of this report)
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<b>A</b>	This report extends and revises Tech scribes the Historical Inflation Prohistorical inflation indices for Arm monthly, is easily revised for change and is capable of handling data for ed as monthly, quarterly, Fiscal Yea (in Calendar Year 1967 base) and infinity report contains updated tables	ogram, a compute my aircraft. Th ges in Bureau of all fiscal year ar, and Calendar flation factors	r program generating e program can be updated Labor Statistics methods, formats. Output is express. Year inflation indices (in any Fiscal Year base).

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20. ABSTRACT.

base. These indices and factors provide a means of adjusting historical cost data for the procurement of Army Aircraft to constant year dollars. Additional features include: computations for the Derivation of Revised Weighting Factors, detailed indices enabling the adjustment of historical Labor and Material cost separately, a discussion of aggregate weighting factors for Labor and Materials, (including trends from sensitivity analysis with more background materials), and additional documentation aimed at making the report useful to a large cross section of the DOD/Rotary Wing Aircraft Community.

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#### DISCLAIMER STATEMENT

The views, opinions, and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision unless so designated by other documentation.

#### **ACKNOWLEDGEMENTS**

The author extends his appreciation to the Kansas City Regional Office of the Bureau of Labor Statistics, U.S. Department of Labor, for special assistance with wage and price data.

Credit is due Mr. Ralph Lilge, USAAVRADCOM, who played a primary role in automating the Historical Inflation Program in 1975.

Ms. Marva Campbell, and Ms. Paula Smith provided excellent clerical support in the revision of this paper.

# TABLE OF CONTENTS

		PAGES
ı.	APPLICABILITY	1
II.	OVERVIEW OF HISTORICAL INFLATION PROGRAM	2-8
	A. History	2
	B. Construction of Indices - Methodology	3
	C. Indexing Techniques	4
	D. Weighting Factors	4
	E. Data	5
	F. Validity and Firmness of Data	5
	G. Particular Problems	6
	H. Change in Content from the Previous Report	8
III.	DATA CONCERNING THE MATERIAL CONTENT OF U.S.	0.14
	ARMY HELICOPTER SYSTEMS	9-14
IV.	ANALYSIS: (TECHNICAL SECTION)	15-23
	A. Chronology	15-17
	1. Characteristics of the RAND Report	15
	2. Characteristics of the September 1973 Cost Research Report	16
	3. Characteristics of the August 1974	17
	Cost Research Report	
	B. Data Sources	18
	C. Methodology	18-23
	1. Overhead and Productivity Adjustments	18
	2. Revision of Weighting Factors	19
	3. Construction of Indices	20
v.	SENSITIVITY ANALYSIS FOR AIRCRAFT AIRFRAME	25
vi.	DESCRIPTION OF COMPUTER PROGRAM	28
VII.	REFERENCES	29
III.	BIBLIOGRA PHY	30
APP	PENDIX A: Computations for the Derivation of Revised Weighting Factors for the	A-1
APF	Historical Inflation Program PENDIX B: Producer Price Indexes and Earnings Series Used in Historical Inflation Program	B-1

# TABLE OF CONTENTS

		PAGE(s)
APPENDIX C:	Historical Flow of Producer Price Indexes and Earnings Series Used in Historical Inflation Program with Revised Weighting Factors	C-1
APPENDIX D:	Annual Data for Historical Inflation Program	D-1
APPENDIX E:	Monthly Data for Historical Inflation Program	E-1
APPENDIX F:	Historical Inflation Indices	F-1
APPENDIX G:	Annual Data for Historical Inflation Program, Raw Material Portion Only	G-1
APPENDIX H:	Monthly Data for Historical Inflation Program, Raw Material Portion Only	H-1
APPENDIX I:	Historical Inflation Indices, Raw Material Portion Only	I-1

I. <u>APPLICABILITY</u>. The inflation indices and factors published in this report are applicable to the adjustment of historical costs for the procurement of Army aircraft. These costs are currently funded by the Aircraft Procurement, Army and Other Procurement Army appropriations.

#### II. AN OVERVIEW OF THE HISTORICAL INFLATION PROGRAM.

#### A. History.

The Historical Inflation Program for Army aircraft procurement was developed using a sequence of documents, the first being Aerospace Price Indices, by H.G. Campbell (RAND # R-568-PR, 12/70). Essentially, the RAND document established a basis for the construction of general indices, identified items of special interest and concern, and indicated that no substitute exists for thorough analysis of the specific items being characterized by an historical index. Several indices, designed specifically for rotary wing aircraft, have been developed for the adjustment of procurement cost since that time by the United States Army Aviation Systems Command, and this function has been carried over to the Components and Operational Studies Branch, Cost Analysis Division, Office of the Comptroller, USATSARCOM.

The current indices are based on research done in the period 1972 to date. In July 1973, the Office of the Comptroller, Cost Analys.s Division, made a study of materials used in the Army helicopter systems then, or most recently, in production. Cost Information Reports were assembled, and contractors were asked to supply lists of materials for both airframe and engine, on the basis of contribution to weight. Contractor technical and engineering personnel provided assistance with data interpretation and definitions for items whose composition was unclear from engineering documents and Detailed Weight Statements.

The following aircraft were selected:

UH-1H OH-6A AH-1G CH-47C OH-58A CH-54B

This selection of aircraft is deemed typical for several reasons. First, the six helicopter systems listed above make up the majority of the U.S. Army Air Order of Battle listed in Section III. Second, a number of these aircraft had been produced on a long term, continuing basis in previous versions. And, third, and most important, they are among the systems most likely to be used in developing Cost Estimating Relationships for new systems by use of parametric techniques.

The September 1973 Historical Inflation Cost Research Report, cited in the references, was the first report to make full use of this information. It was updated by the August 1974 Cost Research Report, and then by a series of expanded analyses under current title, Historical Inflation Program, since that time. A list of the assumptions and changes in methodology over the period referenced are included in the body of the Technical Section.

#### B. Construction of Indices - Methodology.

The indices are developed by a stepwise, building process, which computes the contributions to cost on a weighted value-added basis.

- 1. First, the contribution to cost of small parts and other purchased equipment is calculated.
- 2. Next, the cost contribution of purchased parts is combined with that of raw materials to get the cost of purchased materials.

- 3. Purchased material cost is then combined with contractor labor cost to compute the index for products such as engine or airdrame.
- 4. The indices for engine, airframe, and avionics are combined to get an overall index for aggregate aircraft.

#### C. Indexing Technique.

The procedure used is "Cost-Weighting". The information obtained from 1973 research on "helicopter materials" established percentages based on weight. Because the indices used to track material costs are based on monetary considerations (e.g., Producer Price Index; Wages, by Standard Industrial Code), percentages by weight had to be transformed into percentage contributions to cost, if PPI and SIC inflation factors were to be applied directly. Based on the premise of profit maximization, contractors should tend to minimize the use of expensive materials subject to maintaining acceptable performance standards; essentially, materials with a high cost per unit weight ration would we used sparingly. Adjusting a percentage based on weight using I monetary index would not only result in an improper index initially, but also one with diminishing reliability. The latter blas is avoided by calculating the contribution to cost, instead of merely the contribution to weight.

D. <u>Weighting Factors</u>. Although the model is developed by an instructive, stepwise process, the revised weighting factors in the table (at the end of Appendix B) implicitly include all calculations. The index, as stated, is merely the direct sum of

the products of the weights and their corresponding material index values. The development of weighting factors is illustrated in the Technical Section.

Data. The data used appear in two different forms. Yearly made are presented by Calendar Year 1947 to date, and monthly form for 1967 to date. The yearly data, pre 1958, are condensed that three columns; the data for 1958 and later are presented in an 16 column format - 14 columns for material inputs, and 4 for labor. Beginning with report 76-1B, all columns of the data set have been identified by PPI and SIC code, as well as a verbal description in the column heading. PLEASE NOTE: The data, their pharapterization, and any redefinition, by the Bureau of Labor atutistics over the years, are tracked in line diagram C-2.

### 1. Validity and Firmness of Data.

The Producer Price Index and Wage Data was supplied by the Linear City Regional Office of the Bureau of Labor Statistics, Lie. Department of Labor. The data comes in three types of published form: (1) a cumulative history covering all relevant past years on a monthly basis. (2) A yearly edition (such as wage and Price Index Annual Supplement) which lists the previous 12 months, and (3), monthly publications which list the most current month and several other months for comparison.

For data to be "firm" it must be at least 18 months old, in most cases, because it is benchmarked and adjusted after the fact. For example, small samples are taken throughout the year; however, the continuous one month (the benchmark month), a much more comprehensive

sample is taken. Due to its significantly larger sample size, the benchmark month's sample is felt to be more representative than those of other individual months, and if the benchmark civerges from the pattern, the other months are adjusted proportionately to conform to its base as benchmark.

The data in the cumulative history "type" publication is felt to be firm or "final". Basically, such publications provide a chronological listing of all firm data available for the past history of those indices. However, the data in such publications is usually 18 to 24 months behind the current period. The data for each month listed in the Annual Supplements is not necessarily firm because benchmarks occur during the Calendar Year, and at different times for different series. Adjustments may not have been made before the Annual Supplements are published. The monthly publications, which contain information on the most current periods, are even more tentative. In general, the Producer Price Index Data are firm before Wage Indices for the corresponding month, probably due to the fact that it is easier to define and measure price changes for commodities than for human skills.

#### C. Particular Problems.

1. The Wage Data for the period CY 1971-CY 1973 changed, in many cases, during FY 75-FY 76. The wage-price freeze utballowed certain salary and wage increases, but a number of these were awarded on a retroactive basis based on legal decisions uthicred several years after the fact. Because such payments involved touts directly attributable to labor services during the

period, these payments had to be incorporated in the indices to provide an accurate measure of labor earnings.\*

2. With the September 1978 issue of Employment and Earnings, the reporting categories for a number of types of production labor were changed. In effect, the 1967 Standard Industrial Classification Code has been supplanted by the 1972 SIC Code.

The Changes are as follows:

SIC Code & Title		-to-	SIC C	ode & Title
3674,9	Electronic Devices & Components		367X	Electronic Com- ponents and Access- ories
3722	Aircraft Engines and Engine Parts		3724	Aircraft Engines and Engine Parts
3723,9	Aircraft Parts and Equipment		3728	Aircraft Equipment

The reclassification had little or no impact on this study the to the essential similarities, by definition, of the old and new labor categories.

3. Potential discrepancies in the data set were eliminated by comparing data elements with the most recent data on microfiche for the 14 material and 4 labor categories used in the report. All data were verified to be the latest and most accurate available, on 20 January 1979.

\*See EIS Bulletin No. 1312-10, Employment and Earnings 1909-75 for a detailed explanation (esp. p. 769).

#### E. Change in Content from the Previous Reports.

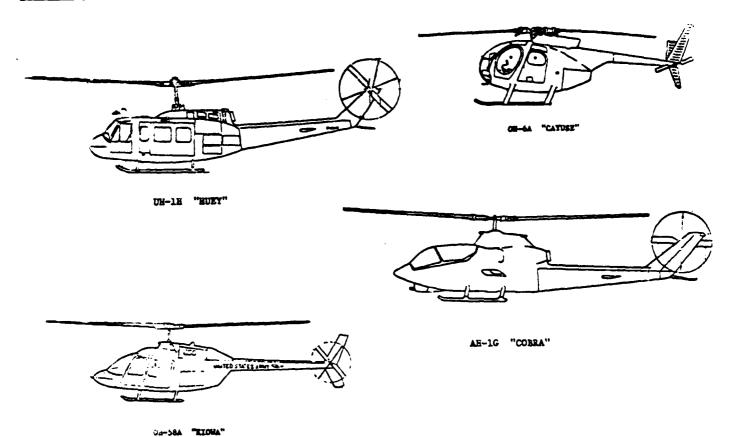
A printout of the computer program used for the Historical Inflation Program is not included in this report, for two reasons.

Let use found that a list of structural equations would better serve the purpose of elucidating the model. At the same time, with the reduced form equations and clearly identifiable data sets, any index figure can be checked by direct calculation (See Appendix 2, page B-4). Second, direct duplication of the deck from the original is more accurate and efficient than keypunching copies from the program source listings, should such an external need ever develop.

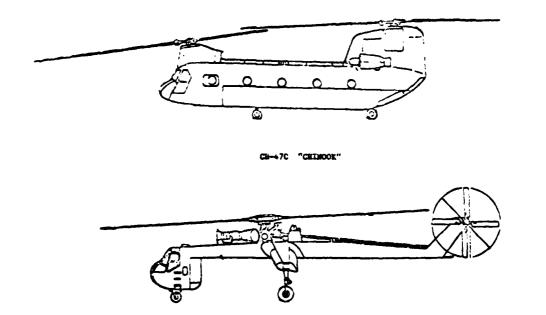
A sensitivity analysis, which displays the effects resulting from a change in the relative weights of labor and material in the Historical Index, has been included in this revision. percentage contribution to cost attributable to labor and materials varies among aircraft systems, and the values used in this report--.178 (materials) and .622 (labor) -- are an average for the six systems referenced. The sensitivity analysis yields a measure of the extent to which the index for a single aircraft system would vary, if that system is built with an aggregate labor/material mix which differs from the six system average. The accuracy of the reweighted index, however, also requires that the other assumptions well satisfied, i.e., the 14 material and 4 labor indices are typical of the system being reviewed. Because such weighting is a concern in developing estimates in inflated dollars, the effect of such "weighting changes" should be of significant interest to many readers.

# DATA CONCERNING:

The Material Content of U.S. Army Helicopter Systems



# JS ARMY AIRCRAFT



CB-548 "SKYCRANE"

whg

# Air Order of Battle

United States Army - Quantities and Types of Aircraft

#### ROTARY WING AIRCRAFT

System Designation	Popular Name	Approx <pre>Empty Wt.</pre>	No. of Aircraft	Percent of Fleet
AH-1	"COBRA"	5,800 lbs.	800	10.2%
UH-1	"HUEY"	5,100 lbs.	4,200	53 <b>.2</b> %
CH-6	"CAYUSE"	1,200 lbs.	450	5 <b>.7</b> %
OH-58	"KIOWA"	1,750 lbs.	1,900	24.1%
CH-47	"CHINCOK"	19,500 lbs.	430	5.5%
Ca-54	"SKYCRANE"	19,800 lbs.	<b>7</b> 5	1.0%
UH-60A	"BLACK HAWK"	10,500 lbs.	29	.3%
AH-64A	"ADV. ATTACK"	10,400 lbs.	O	0%
			7,884	100.0%

Sources: FM 101-20 (UNCLASSIFIED).
World Combat Aircraft Directory
Doubleday and Co.,

# USAAVSCOM COST ANALYSIS DATA 1976

AMSAV-CCT

31 July 1973

MENORANDUM THRU: Mr. Garald Dockins, Acting Chief, Estimates and Studies Branch FOR: Mr. Edward P. Laughlin, Chief, Cost Analysis Division Standard Subject: Material Composition Analysis of U.S. Army Helicopters, July 1973

On 6 June 1973, this office received a request from Mr. W.J. Tropf.
 AMC Comprisols Office, Cost Analysis Division, for the material composition of a UN-IM balteoper. On 18 June 1973, Chief, AVSCOM Comproller Office, Cost Analysis Division requested a similar analysis be performed on the following Army helicopters:

- . CH-47C.
- b. 04-64.
- c. 08-584.
- d. AH-16.
- . CH-548.
- A search of the technical date files and sircraft drawings failed to produce the desired data. The analysis was completed with the assistance of AVSCOM Systems Pagineering Division, Directorate of RDSE and pertibent U.S. Army Plant Artisities. Contractors were also contexted during the data search, and ethers. The data obtained are a combination of expert opinion, engineering estimates and contractor data obtained under previous contracts.
- 3. The following Cost Analysis personnel were assigned to this project:

Assigned To	Gerald Dockins	John Thilmeny	. Gerald Dockins/James Cadell
	James Cadell	Gerald Docking/Jemes Cadell	James Cadell
Aircroft Presen	UN-18	CH-6A	AB-10
	CH-67C	CH-58A	CF-54B

AMSAV-CCE 31 July 1973 SUBJECT: Material Composition Amalysis of U.S. Army Helicopters, July 1973

4. Copies of the Material Composition Analysis have been placed in the following files:

e. A new file folder titled "Materiel Composition Analysis".

b. A complete copy of the findings placed in the file folder titled "inflation".

 c. A separate file of the findings relating to turbine engines has been created.

5. Summary Tables and Material Composition Analyses are inclosed.

Lame M. Carlet

l Incl

/ JAMES M. CADELL Math-Stat

12

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Materia. Composition Analysis of Army Helicopters (Dated July 1572) Material (Pounds,

#### U.S. Army Helicopters.

CTLCATE TOUGH	man i gat	A. LELLINGE	Steel	Magnesium	Ticanium	Copper	brass	oronze.	Lead	Tungsten	Nickel Alloy	Nonsetalio
-4-10	5,394;	1,888	1,780	216	108	593	0	0	216	G	6	593
Jac	4,973	1,579	1,718	280	70	400	100	٥	100	a	. 0	726
JH-6A	1,163	566	218	46	•	30	23	3	0	1	. 25	150
DE-36A	-,586	536	543	55	15	101	0	0	43	0	c	293
Za-470	10,400	8,312	7,989	1,304	63	676	4	16	0	45	0	2074
CX-548	دَه, رد_	931, ه	3,860	72	970	516	20	23	1	0	788	4584
			•	!	i	i	i	!	İ	1	1	

# U.S. Army Turbine Engines.

mi_site	Dry Weight	Aluminum	Steel	Magnesium	Titanium	Copper	Nickel Alloy	Nonmetalic	Stainless Steel	Steel Alloy
753-2-23	527	79	316	86	26	3	٥	23	c	, 0
T63-A-5A	138	; 1	106	26	, c	a	. 0	3	o	. 0
183-a-700	138	1	108	26	c	L o	٥	3	i a	0
755-4-70	590	0	516	50	20	10	٥	. 0	0 .	٥
77:70G	981	1	. 0	G	, 0	. 0	290	٥	596	94

# U.S. Army Helicopter Airframe, Only.

Aircraft Monel			Strel	Magnesium	Titanium	Copper	hrase	grouse	Lead	Tungaten	Nickel Alloy	Nonmetal (c
AM-1G	4,867	1,809	1.464	136	82	590	0	0	216	0	0	570
LH-IH	4,446	1,500	1,402	200	44	400	100	0	100	a	٥	700
OH-6A	1,025	666	109	20	1	30	23	3	C	1	25	147
0h->6A	1,448	. 536	1 434	29	15	101	i 0	0	43	o	0	290
CR-47C	19,303	8,312	6,969	1,204	. 23	656	4	16		45		2,072
CH-54B	17,803	8,928	2,480	72	970	516	20	23	1	0	209	4,384

TABLE 3 \*\*
SUMMARY OF AIRFRA.4E AND ENGINE CIR DATA\*

	(1) Airframe	Engine	(2)
Labor	62.08%	40.85%	
Auterial	<u>37.92</u> %	<u>59.15</u> %	
Total Cost	100.30%	100.30%	
Rew Material	41.88%	70.56%	
Pural was Equipment	58.12%	<u>29.42</u> %	
	100.00%	100.30%	

- (1) Airframe factors were obtained from a sample of 15 CIR reports representing the AH-1, CH-47, CH-54, OH-6, and OH-58 aircraft systems.
- (2) Engine factors were obtained from a sample of 14 CIR reports representing 11 different turbine engine configurations procured from Lycoming, Allison, General Electric, and Pratt & Whitney.

\*As adjusted by Labor and Material price movements.

\*\* From HISTORICAL INFLATION INDICES FOR ARMY AIRCRAFT U.S. Army Aviation Systems Command, St. Louis, 1974, p. 11.

TECHNICAL SECTION

- IV. ANALYSIS: (TECHNICAL SECTION).
- A. <u>Chromology</u>. Previous efforts related to the development of Inflation indices include Aerospace Price Indexes by H.G. Campbell, MAND Corporation, December 1970 (Reference 1) and two Cost Research Reports: <u>Historical Inflation Indices for Army Aircraft</u>, Cost Analysis Division, Office of the Comptroller, US Army Aviation Systems Command, September 1973 (Reference 4), and <u>Historical Inflation Indices for Army Aircraft</u>, Cost Analysis Division, Office of the Comptroller, US Army Aviation Systems Command, August 1974 (Reference 5).
  - . Characteristics of the RAND Report.
- a. Specific <u>Producer Prices and Price Indexes</u> (Reference 8) and <u>Employment and Earnings</u> (Reference 2) data have been selected as proxy series for similar commodity and labor categories experienced in the procurement of Army aircraft. Aircraft inflation indices are constructed from a weighted average of these proxy series. The weighting factors for this average are derived from estimates of the relative contribution to the total aircraft cost made by each component (commodity or industry labor group) comprising the index. The index is thus a "cost-weighted" series.
- b. A 24 percent compounded annual rate for growth of overhead ratios is assumed.
  - c. No adjustment is made for productivity increases.
  - d. Indices are developed on a Calendar Year basis.
- 1. Characteristics of the September 1973 Cost Research Report.

- a. As with the RAND Report, aircraft inflation indices have been constructed from a weighted average of <u>Producer Prices</u> and Price Indexes and Employment and Earnings data selected as proxy series for their similarity to those commodities and labor categories experienced in the procurement of Army aircraft. Weighting factors are proportional to the relative physical weights or masses, rather than the relative costs (as in the RAND Report), of commodities comprising the "composite material" portion of the index. Thus, the "composite material" portion of the index represents a "weight-weighted" series.
- b. Like the RAND Report, a 24 percent annual growth in the overhead ratio is assumed.
  - c. No adjustment is made for productivity increases.
  - .. Indices are developed on a Calendar Year basis.
- e. For years for which certain specified Producer Price Indexes were unavailable, data has been projected from adjacent years.

# 3. Characteristics of the August 1974 Research Report.

a. As before, Producer Prices and Price Indexes and Employment and Earnings data have been selected as proxy series must similar to those commodities and labor categories experienced in the procurement of Army aircraft. The indices have been constructed from a weighted average of these proxy series utilizing the weighting factors used in the September 1973 Cost Research Report. The "composite material" portion of the index represents a "weight-weighted" series.

- b. Unlike RAND and the September 1973 Cost Research Report, no adjustment for overhead growth is assumed.
  - c. No adjustment for productivity increases is assumed.
- d. Indices have been extended to FY 1974 by assuming that data for the September 1973 Cost Research Report represented December and hence the Fiscal Year midpoint, rather than the annual average, of each calendar year.
- E. For years for which certain specified Producer Price Indexes were unavailable, data has been projected from adjacent years.
- 5. Data Sources. Data sources for this report are Producer Prices and Price Indexes (reference 8) and Employment and Earnings (reference 2). To insure that the latest revisions were incorporated into the data base, data was obtained from the Bureau of Labor Statistics Information Center, and Annual Supplements to the Producer Prices and Price Indexes. For Employment and Earnings, cata for any given month was obtained from the latest available source. Data used in this report are displayed in Appendices D, E, G, and H.

#### C. Methodology.

Coverhead and Productivity Adjustments. On the basis of data covering a ten year period, the RAND Report concluded that there exists a secular growth trend of 2½ percent per year in the production overhead rate. The report also concludes that there has been little, if any, improvement in productivity to counteract the observed trend in overhead growth. This conclusion appears to

be unwarranted, particularly in light of productivity gains recorded (as measured by Industrial Production Indices) for similar sectors of industry. Thus, in order not to unduly bias the results of the analysis, this report makes no adjustment for either overhead growth or improvements in productivity.

- 2. Revision of Weighting Factors. From a number of Cost Information Reports, the following weighting factors were developed and reported in the September 1973 Cost Research Report. For the Airframe:
  - 1.375) Raw Material + (.622) Labor 3723,9 (3728)
    = Purchased Equipment
  - (.582) Purchased Equipment + (.418) Raw Material = Total Material
- (.378) Total Material + (.622) Labor 3721 = Total Airframe
  For the Engine:
  - (.599) Raw Material + (.401) Labor 3723,9 (3728)
    = Purchased Equipment
  - (.295) Purchased Equipment + (.705) Raw Material = Total Material
  - 7.599) Total Material + (.401) Labor 3722 (3724) = Total Engines

#### And for Avionics:

(.318) Material + (.685) Labor 3674,9 (367x) = Total Avionics
The the previously published indices, the weighting factors used
to develop the material portion of the indices were made
proportional to the relative physical weights of the various
commodities used in the construction of the aircraft. The
material portion of these indices thus represent a "weight-

welghted" series. In order to be consistent with the intended caposes of an inflation index, the methodology in this program uses index weighting factors proportional to the numerical ground to obtained from multiplying the relative physical commodity weights by the appropriate base year cost per pound. This yields a "cost-weighted" index giving more weight to such expensive commodities as titanium. Unfortunately, however, oprice per pound data are not published in Producer Prices and First Indexes for each of the commodaties used in constructing the indices. To overcome this difficulty, the per pound price is estimated from the available data of the most closely related commodities. To minimize the effect from related commodities which have relatively little economic impact, each price per pound estimate has been developed from a weighted average of available data utilizing the Bureau of Labor Statistics 1975 revised relative weights published in the 1976 Annual Supplement to Producer (Formerly Wholesale) Prices and Price Indexes. The available data then constitutes a weighted sample from which a surrogate price per pound is computed Tot the Producer Price series in question. See Appendix A for the Computations for the Derivation of these Revised Weighting Factors, along with their associated cost contribution pur pound.

#### 3. Construction of Indices.

a. Calendar Year 1967 has been taken as the base of these indices because this year represents the approximate midpoint of the period (1958-1978) for which the data supports the develop-

meri of each of the indices, including those which account for avionics. Purthermore, 1967 conforms to the base used by the Eureau of Tabor Statistics for Producer Price Indexes.

- series, Earnings series, and the associated weighting factors used in the construction of the indices published in this report.

  Lince some of these series have been in existence for only a limited time, other closely related series have been substituted line appropriate mathematical adjustments to insure continuity of the indices. This technique is considered preferable to the lineases of data by projection from adjacent years. Appendix appropriate the historical flow and identifies the effective dates of series conversions, for the Producer Price Index and Earnings data used in the development of the indices published in this report.
- c. The term "aggregate" has been selected to indicate inflation indices applicable to the combined Airframe and Engine (aggregate Air Vehicle Excluding Avionics) and to the combined Airframe, Engine, and Avionics (Aggregate Air Vehicle Including Avionics) to avoid confusion with the term "composite" as in "composite escalation indices". Aggregate indices are based that standard 70-20-10 weighting (see Reference 6) of the Airframe, Engine and Avionics Indices respectively. Aggregate indices are intended for the adjustment of historical data for which the distribution of costs for the Airframe, ingine, and Avionics components is unavailable.
  - i. A new section depicting the raw material portion of

the inflation indices is published as Appendix I. It is intended for applications requiring greater accuracy. Appropriate labor indices can be obtained from the Bureau of Labor Statistics Employment and Earnings series (Reference 2) as follows:

Labor Category	1967 SIC Code	1972 SIC Code	Industry
Airdrame Contractor	3721	3721	Aircraft
Alrirame Subcontractor	3723,9	3728	Other aircraft part & equipment
Engune Contractor	3722	3724	Aircraft engines & engine parts
Engine Subcontractor	3723,9	3728	Other aircraft parts & equipment
Avionics	3674,9	367X	Other electronic components
Aggregate Air Vehicle Excluding Avionics	372	372	Aircraft and parts

- e. The basic Computational Methodology is as follows:
- (1) For Components: Airframe, Engine, and Avionics.
- (a) Calendar Year indices are computed using sum of weighted calendar year labor and material indices.
- (b) Fiscal Year indices are computed in a manner similar to Calendar Year, but the yearly fiscal averages are generated from the monthly data.
- (c) Quarterly Indices are computed by averaging three months data from the monthly data set.
- (d) Monthly indices are computed by direct calculation using monthly data. It is a weighted average of monthly figures computed using the same methodology as in computing the Calendar

Year indices.

For additional information, see Appendix B.

## (2) Aircraft System Cost

The inflation indices for "Aggregate Vehicle" and Aggregate Vehicle without Avionics" are produced by combining the three separate indices:

Component	Relative Weight		
Airframe Index	70%		
Engine Index	20%		
Avionics Index	10%		
<del></del>			
Aggregate Vehicle	100%		

Component	Relative Weight W/o Avionics			
Airframe Index	78%			
Engine Index	22%			
Aggregate Vehicle without Avionics	100%			

b. Reduced form equations are displayed in Appendix B, page B-3.

$$(.7)$$
  $\vdots$   $(.2 + .7) = .78$   
 $(.2)$   $\vdots$   $(.2 + .7) = .22$   
 $1.00$ 

V. DESCRIPTION OF COMPUTER PROGRAM AND ASSOCIATED APPENDICES.

The Historical Inflation Program is a computer program used to generate historical inflation indices for Army aircraft and their major subsystems. Appendices D and G contain the annual data used by the program, while the monthly data, commencing July 1967, are in Appendices E and H. Producer Price Index and Earnings data in these Appendices have been arrayed into columns with the same numerical code sequence used in Appendix B. Historical inflation indices and factors are published in Appendix F. Fiscal Year, quarterly, and monthly indices have been developed from the appropriate monthly data. A section containing the raw material portion only of these indices is published as Appendix I. The labor portion of these indices may be obtained by applying the methodology described in paragraph III.C.3 d, to the data contained in Appendices D and E.

#### VI. SENSITIVITY ANALYSIS

Many considerations are important when constructing Historical Indices for tracking purposes. These certainly include the following:

- a. The nature of the items chosen to comprise the index.
- (1) How typical or representative the items are.
- (2) How closely the proxy items approximate the actual items, if indices for the actual items are not obtainable.
- (3) The number of items used, and the detail in the analysis which produced the indices.
- b. The determination of the percent contribution to cost "Cost Drivers".
  - c. The weighting factors employed in the overall analysis.

A difficult problem confronting cost analysts, who must determine the validity of an historical index for tracking purposes, relates to aggregate labor/material weighting factors. In tracking major weapons systems, the ratio is often stated as say 40/60 - that is 40 percent material and 60 percent labor - as percent contributions to cost. Because it is difficult for analysts to determine the "correct" aggregate mix of labor and material, being external to the project, the aggregate split is certainly of interest.

The value for any index depends on three factors:

- a. The number of factors employed, and the quality and depth of the analysis.
- b. The values for each component of cost used in the construction of the index.
- c. The weights, or levels of importance, given to the factors, individually and collectively.

The objective of this sensitivity analysis is to shed some light on the way in which the aggregate labor/material split affects the index, which has been a controversial issue for some time. Using a set of recursive linear equations, the effect on the historical inflation index, for airframe resulting from varying the aggregate weighting scheme was calculated, in both raw and percentage terms. The calculations were made using a Wang system 2200 minicomputer, and a sample printout follows. The results provide evidence that the key to a successful index resides in item (1), the number of factors employed, and the quality and detail in the analysis used in preparing the index. Because wages are often tied to the Producer Price Index, or other price indices, in labor agreements, it is not surprising that aggregate weighting percentages for labor and material might not be an extremely sensitive issue. However, the calculations provide strong support

for the position that the identification of cost components and the depth and quality of detail in an analysis are of paramount importance, when developing an index to be used in controlling the cost of a major weapon system.

\*\*\*\*\*\*\* SENSITIVITY ANALYSIS \*\*\*\*\*\*\*\*\*
(SENSITIVITY OF AIRFRAME INDEX TO CHANGES IN GROSS WEIGHTING FACTORS)

#### CALENDAR YEAR 1978

GROSS MATL	GROSS LABOR	PURE MATL	PURE LABOR	NEW INDX	CURR INDX	PERCENT CHANGE
37%	. 6220	2411	. 7588	2. 1471	2. 1470	Ø. ØØ
260	. 8688	1068	. 8931	2 1659	2. 1470	<b>9.</b> 88
<b>25</b> 6	. 7500	. 1408	. 8591	2. 1611	2. 1470	නි. <del>සිරි</del>
208	7000	1777	. 8222	2, 1559	2. 1470	Ø. 41
15k	6500	. 2175	. 7824	2. 1504	2. 1470	ย. 15
400	. 6000	. 2603	. 7396	2. 1444	2. 1470	- 0.12
450	5500	. 3059	. 6949	2. 1380	2. 1470	- Ø. 41
පරිය	5999	3545	6455	2 1012	2. 1470	<b>- 8</b> . 73
שבים	4500	4059	. 594ต	.d. <b>1</b> 239	2 1476	- 1, 67
ಕಾರಿತ	4000	4603	. 5.96	3 <b>116</b> 3	d. 1475	- 1. 4년
±10	2506	5175	. 4824	2. 1683	a 1470	n 1, 80
Zas.	<u> 2008</u>	5777	. 4222	2. <b>8998</b>	2 1470	- 2 19
/5 <sub>4</sub>	೨೮೮	6408		ಪ ಟಾಕಾಗಣ	2 1470	- 2 60
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### VII. REFERENCES.

- 1. Campbell, H.G., Aerospace Price Indexes. Santa Monica, CA: The RAND Corporation, R-568-PR, December 1970.
- 2. Employment and Earnings. Washington, DC: US Department of Labor, Bureau of Labor Statistics
- 3. Field Manual 101-20, Army Aviation Planning Manual, Washington D.C.: Headquarters, Dept of the Army, January 1979.
- 4. Historical Inflation Indices for Army Aircraft.
  St. Louis, MO: US Army Aviation Systems Command, Office of the Comptroller, Cost Analysis Division, September 1973.
- 5. Historical Inflation Indices for Army Aircraft.
  St. Louis, MO: US Army Aviation Systems Command, Office of the Comptroller, Cost Analysis Division, August 1974.
- 6. Letter, subject: Historical Cost Inflation Indices for Army Hardware and R&D Costs. Washington, DC: US Army Materiel Command, 26 October 1972
- 7. Memorandum, subject: Material Composition Analysis of US Army Helicopters. St. Louis, MO: US Army Aviation Systems Command, Office of the Comptroller, Cost Analysis Division, 31 July 1973.
- 8. Producer Prices and Price Indexes. Washington, DC: US Department of Labor, Bureau of Labor Statistics.
- 9. World Combat Aircraft Directory. Garden City, NY: Doubleday and Company, Inc., 1976.

### VIII. BIBLIOGRAPHY.

- 1. Hibdon, James E., Price and Welfare Theory. New York, NY: McGraw-Hill Book Company, 1989.
- 2. International Financial Statistics. Washington, DC: International Monetary Fund, Monthly.
- 1. Letter, subject: <u>Inflation Guidance</u>. Alexandria, VA: U.S. Army Materiel Development & Readiness Command, Office of the Comptroller, Cost Analysis Division, 17 May 1979.
- Letter, subject: <u>Inflation Guidance</u>. Alexandria, VA: U.S. Army Materiel Development & Readiness Command, Office of the Comptroller, Cost Analysis Division, 17 September 1979.
- 5. <u>Measuring Price Changes of Military Expenditures</u>. Washington, DC: US Department of Commerce, Bureau of Economic Analysis, June 1975.

### APPENDIX A Computations For The Derivation Of Revised Weighting Factors For The Historical Inflation Program

COMPUTATION OF THE DERIVETION OF REVESION WELCHTING PACTORS.
FOR THE HISTORICAL INFLICTION PROGRAM

Weighted <sup>4</sup> 1967 Price Per Pound	.2376	.0737	, c y y	. 0497	. 14	3595	.4185
Product 3	.001585 .001793 .003822 .003 .008199 .004671 .002228						
Weight?	.006 .009 .021 .021 .020 .020 .009						
1967 Price Per Pagnd	.2642 .1953 .1953 .1820 .25 .41 .2224 .2476	.0737	.5531	.0497	.14	.3595	.4185
Commodity	RUBBER AND PLASTIC PRODUCTS Latex No. 1 Ribbed Smoked Sheets No. 2 Ribbed Smoked Sheets No. 3 Amber Blanket Butyl, Regular Neoprene, GN Type Styrene Butadiene, Not Polybutadiene, Non-Staining Whole Tire Reclaim	SHEETS, C.R., CARBON	SHERTS, C.R., STATMERSS	STEEL CASTINGS CLOSED DIE FORGINGS Ingot Molds	LEAD, PIG, COMMON	MAGNESTUM, PIG INGOF	ALUMINUM SHEEP
अल्डा हेर्नु		13	10 13 02 64	10 15 01 41 10 15 01 53 10 15 01 11	22	10 22 01 51	10 25 01 01
	A 2						

अविंठे । स्वेत	Commodity	1967 Price Per Pound	Weight 2	Product 3	Weighted <sup>4</sup> 1967 Price Per Pound
10 25 01 13	ROD, SCREW, MACHINE STOCK	.6315			.6315
25 01 17 25 01 13	EXTRUSION, SOLID CIRCLE SIZE 4 TO 5 Rod, Screw, Machine Stock	.6315			.6315
10 25 02 31 32 33 33	COPPER AND BRASS MILL SHAPES Cartridge Brass Strip, 70-30 Alloy Yellow Brass Rod (62-35-3 Alloy) Yellow Brass Tube (70-30 Alloy) Copper Sheet or Strip	.6033 .4602 .7841 .6924	.121 .082 .048 .108	.073 .03774 .03764 .07478	.6216
10 25 04 63	MONEJ, SHEFT, CR 400 ALLOY	1.3752			1.3752
10 25 05 25	TITANIUM MILL SHAPES <sup>5</sup> Titanium Bar, Ground, GAL-AV	5.2926			5.2926

Weight is Bureau of Labor Statistics Revised Relative Weight for the Wholesale Price Index. Source: 1975 Annual Supplement to Producer Prices and Price the Historical Inflation Program. Indexes. 5.

Capitalized and Underlined Commodity Titles indicate PPI Series actually used in

NOTES:

3. Product = (1967 Price Per Pound) x (Weight).

4. Weighted 1967 Price Per Pound = Product Weight

NOSYSS (Continued):

1967 Titanium Bar Price Per Pound computed by utilizing Titanium Sponge index as surrogate for 1967 - Dec 1970. Titanium Mill Shapes index established December 1970. Titanium Sponge index for December 1970 is 95.5. 5.

Figures may not sum due to rounding.

2200 8	contr. t	Engine	.0023	.2625		6500.		.0225	.0071	.0021	.0051	.0025	.1364	.0817	.5281
ison o Sioinsi 3	centr.;	Alfiane	.6211		.0057		.0007	.0062	.0560	.0142	.0422	.0159	6.00.	.0691	.2411
	configuration to cost per 1b.	Engine	.00285	.32301		.00725		.02768	.00879	.00253	.00632	.00311	.16777	10056	.64986
	contr. to cost per 1b.	ALFITAME	.04039	•	.01093		.0014	.01186	.10715	.02715	.08083	.03046	.01513	.13231	.46167
N OF	1967 COS:1'	rer round	.2376	.5531	.0497	.0497	. 14	.3595	.4185	.6315	.6315	.6216	1.3752	5.2926	
DEKIVATION 16 FACTORS 18ATION PR	contrib. to weight	au fura	.012	.584		.146		.077	.021	400.	.01	.005	.122	• 01 9	1.000
COMPUTATIONS FOR THE DERIVATION OF REVISED WEIGHTING FACTORS FOR THE HISTORICAL TREIATION PROGRAM	contrib. to weight	uri it ame	.17		. 22		.01	.033	.256	.043	.128	.049	.011	.025	1.000
COMPUTATI REVI FOR THE BIS	Commodity		Rubber and Plastic Products Sheets, C.R., Carbon	Sheets, C.R., Stainless	Steel Castings .	Closed Die Forgings	Lead, Pig, Common	Magnesium, Pig Ingot	Aluminum Sheet	Rod, Screw, Machine Stock		Copper and Brass Mill Shapes	Monel Sheet, CR 400 Alloy	Titanium Mill Shapes	
	PPI Code	-	07	10 13 02 64	15 01	10 15 01 53	22 01	22 01	25 01	25 01	25 01	25 02	10 25 04 63	10 25 05	

Revised Weighting Factors Proportional to Cost Contribution Per Found. Previous Weighting Factors expressed as a proportion of "composite material" index. Revised Weighting Factors expressed as a proportion of the total index. Previous Technical Report (TR 76-1) omitted nickel component (represented by Monel Sheet) from Engine index. NOTES

(RETATIVE IMPORTANCE OF MATERIAL (RAW) IN OVERALL INDEX) ALLUSTMENT FACTOR COMPUTATIONAL FORMULA × 1967 CUST ë PER × PREVIOUS WEIGHTING FACTORS CONTRIBUTION TO MEIGHT:

AIRFRAME & ENGINE WEJGHTING FACTORS

APPENDIX B
Wholesale Price Indexes And Earnings Series
Used In
Historical Inflation Program
With Revised Weighting Factors

PRODUCER PRICE ENDEXES AND EARNONS SECOES
USED IN HISTORICAL INFLATION PROGRAM AND
REVISED WEIGHTING FACTORS

Remarks										
Avionics			.3150		.6850				: :	1.0000
Engine	.0023 .2625 .0059 .0071 .0021 .0051	.0817					.4010	6020.		1.0000
Airframe	.00211 .0021 .0057 .0062 .0560 .0142 .0422	.0691				.6220		.1369		1.0000
Commodity	Rubber and Plastic Products Sheets, C.R., Carbon Sheets, C.R., Stainless Steel Castings Closed Die Forgings Lead, Pig, Common Magnesium, Pig Ingot Aluminum Sheet Rod, Screw, Machine Stock Extrusion, Solid Circle Size 4 to 5 Copper and Brass Mill Shapes Monel Sheet, CR 400 Alloy**	Titanium Mill Shapes	Electronic Components	Industry	Other Electronic Components	Aircraft	Aircraft Engines and Engine Parts	Other Aircraft Parts and Equipment		
PPI Code	07 10 13 02 62 .04 10 13 02 64 10 15 01 41 .05 10 22 01 11 10 22 01 11 10 25 01 01 .02 10 25 01 13 10 25 01 17 .02 10 25 04 63	10 25 05	11 78	SIC Code	3674,9 (367X)	3721	3722 (3724)	3723,9 (3728)		
Var	(1) (2) (3) (4) (5) (6) (6) (10) (10) (11)	(13)	(14)		(15)	(16)	(17)	(18)		B 2

COMPUTATIONAL FORMULAS : Labor Cost Indexes

The data converning cost of Jabor services is supplied by the Burgau of Labor Statistics, The dollar to percentage conversions for the labor categories are pressed in dollars/hour, labor cost must be converted to a percentage (index) before calas hourly wage rates by Standard Industry Codes, and is reported on a regular basis in Employment and Earnings. Because the material indices are percentages, and wages are culations can be made. made as follows:

	INDEX	INDEX	INDEX	
	x 100% =	X 100% =:	x 100% =	
		×	×	:
1961	Hr. Wage	3.49	3.42	
•	. -		1	•
	Current Hr. Wage	Current Hr Wage	Current Hr. Wage	Current
Industry	Other Electronic Components	Aircraft Production Workers	Aircraft Engines and Engine Parts.	Other Aircraft Parts and
SIC Code	3674,9 *(367x)	3721	3722 <b>4</b> (3724)	3723,9
) 5 8	(15)	(16)	(17)	(18)

\* After Cy 78, Bracketed Code Replaces Code Directly Above It.

100% =

×

3.35

Hr. Wage

# REDUCED FORM BOUNTION

Airframe = 
$$.0211 \text{ (V-1)} + .0021 \text{ (V-2)} + .0057 \text{ (V-4)} + .0007 \text{ (V-6)}$$

Avionics = .3150 (V-14) + .6850 (V-15) (100/2.34)

в 4

Variables 
$$(V-1)$$
 thru  $(V-18)$  are defined on page  $B-2$ 

### DATA/DEVELOPMENT

- (1) Calendar Year Data As given on printout.
- (2) Monthly Data As specified on printout.
- (3) Quarterly Data Development from Monthly.

Quarterly = 
$$[(Month_{T-1}) + (Month_T) + (Month_T)] / 3$$

Fiscal Year Data - Developed using appropriate quarterly data. Ω4 Ω3 Fiscal Year Average = (4)

(Quarters of Fiscal Year)

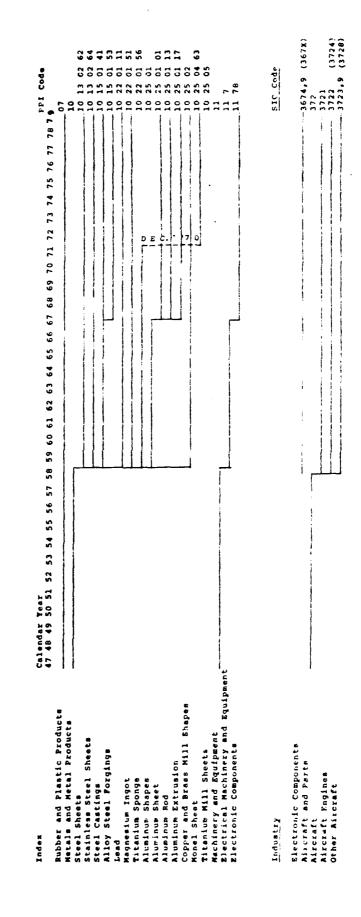
Variables specified on preceding chart.

### APPENDIX C

Historical Flow of Wholesale Price Indexes and Earnings Series Used in Historical Inflation Program With Revised Weighting Factors

Historical Flow of Producer Price Indexos and Earnings Series used in Historical Inflation Program

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### APPENDIX D

ANNUAL DATA FOR THE HISTORICAL INFLATION PROGRAM FOR L. S. ARMY ROTARY WING AIRCRAFT

	17 cm Reg. 3- cm	(3) (7) (4) (1)		1,71 2,51 2,51 2,45 1,77 2,61 2,61 2,55 1,67 2,73 2,72 2,44 1,41 2,78 2,81 2,78	2.95 2.99 3.60 3.09	3,15 3,17 3,34 3,32 3,49 3,42 3,64 3,65		
				200° 200° 200° 200° 200° 200° 200° 200°	96.76 45.78 95.18	95.15		(14)
				143, 50 180, 40 111, 40	97.36 97.36	96, AB 106, 00 109, 60 95, 30	95,50 167,90 100,70 100,70 171,60 171,60 171,60	(31)
	<b>حد</b> عدد			70.50 70.50 87.70 89.40	91.60 91.60 90.64	90.76 94.20 164.86		(2)
	¥ == ==	¥ .		74.10 80.60 81.79	73.90 73.40 78.50	99.00 99.00 100.00 107.30		(11)
	14)	L V a		107.60 100.00 110.80	106.70 102.96	96,46 96,50 100,46 102,46	123.20 12	(10)
	173			167.60 105.05 110,89	106, 76 102, 30 101, 46	98,16 98,16 100,16 91,10	44.50 44.50 44.50 44.50 45	Ê
	225 2 4			107.64 106.46 110.89		99.46 94.56 100.86 160.48		( <del>&amp;</del> )
				160.00 160.00 130.00		100,00 161,00 160,00 160,00		(£)
				95.70 87.20 83.20 77.60	54.78 77.50 97.40	114.30 107.20 107.20 100.00		(9)
	36, 39,	THREE IMPUSS ONLY		53,28 96,49 46,39 97,59	97.43 97.43 97.10	95.10 27.90 100.00 102.00		(5)
	BFFO	0		97.28 90.48 90.39 90.39	97.40 17.60 97.10	24,12 1,400 100,000 101,100 111,100		( <del>p</del> )
~	575.1	1.560 1.750 1.750	2.0.5 0.0.0.5 0.0.	2.558 125.70 121.58 120.28	115.40 107.00 94.4	91.40		3
`	e 2 2 )	1 2 4 4 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	25.55		34.78 34.49	94.00 54.30 100.00 104.70		8
<b>-</b> ,				18 . 10 10 . 10 10 . 10			16. 10 17. 10 17	(D)
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MATERIAL COST DATA

### APPENDIX E

MONTHLY DATA FOR THE HISTORICAL INFLATION PROGRAM:

## CONTREY BAIA LO MATERIALS

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### MONTHLY DATA FOR MATERIALS ONLY

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### APPENDIX F

HISTORICAL INFLATION INDICES :

7.7.7.1 1.7.1.1 1.7.1 1.7.1.1

F 2

		:				AGGREGATE	AIR VERICLE	AGGREGA1E.	AIR VEHICLE
A B KA KAMI.	ATRIKAMI, PARTIGLITAS	1.16 [1.1	PRODUCT FOR	AVIONICS	FROUGCT ION	EXCLUDING	AVIONICS	INCLUPING	AVIONICS
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A2.4	2.1934	2.46	2.5115	81.5	2.3950	95.0	2.7243	84.7	2.6917
A3,3	2.7.54	95.6	2,5531	83,2	2.3392	95.4	2.7142	85.1	2,6775
65,3	2.7006	95.5	2,4759	P. 38	2,2773	87.6	2,6461	87.3	2.6101
0°99	2.67.48	92.6	2,4726	87.4	2,2239	88.1	2,6290	88.1	2.5888
87.1	2.6430	6.56	2.4670	88.1	2.2063	89.1	2,6009	99.0	2,5618
88.0	2.6160	<b>5.</b> 56	2.5052	0.68	2,1851	89.5	2,5900	4.66	2.5497
c.62	2.5422	92.3	2.5619	91,1	2,1335	69.68	2.5776	0.06	2,5326
92.3	941 4° č	45.7	2.5507	95.6	2,0997	92.4	2,5071	92.4	2,4663
5,96	2.3973	95.5	2.4766	95.5	2,0367	96.3	2.4070	96.2	2,3702
100.0	2,3031	100.0	2.3650	100.0	1. 3444	100.0	2,3169	100.0	2.2796
103.8	2.2187	104.6	2,2610	104.1	1,8671	104.0	2,2282	104.0	2,1920
110.4	2.0365	111.1	2,1279	108.1	1.7983	110.6	2.0958	110.3	2,0666
116,9	1.9708	121.8	1,9415	113.2	1,7177	118.0	1,9641	117.5	1.9404
120.9	1.9058	127.6	1,8537	117.4	1,6556	122,3	1,8937	121.9	1.8708
128.9	1.7465	130.7	1.8090	121,0	1,6073	129.3	1.7916	128.5	1.7742
137.7	1.6720	155.3	1.7485	125.4	1,5507	137.2	1,6888	136.0	1,6760
154.0	1.4957	157.2	1,5047	134.3	1,4475	154.7	1.4977	152.7	1,4933
172.0	1,3390	178.1	1.5277	146.2	1,3303	173.4	1.3364	170.6	1,3359
184.6	1.2477	189.7	1.2470	152.7	1.2734	185.7	1.2476	182.4	1,2497
197.8	1.1641	207.6	1.1391	164.4	1,1828	200.0	1,1584	196.5	1.1604
214.7	1.0725	219.3	1.0782	163.4	1,0601	215.A	1,0738	212,5	1.0726

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HISTORICAL INFLATION MONTHLY INFICES

AIR VEHICLE AVIONICS	FACTOR	FY79=	0		•	•	•	•		•		•	2.230		, ,		٦.	•	٦.	٦.	٦.	_				2.0904				2.0249			•	1.9710	1.9682	1.9638	1.9572	1.9523	1.9476		1.9152		•	1.8862	•	1,8926		9	ο.	1.6006
AGGREGATE INCLUDING	DE.	CY6.7=	00	:	4.66	100.3	100.6	101.5	102.0	200		102.9	102.9	102.8	103.2	103.2	104.2	104.9		-		•			8	÷,		6.	.0.	• ·	113.7	Š			15.	16.	÷	<u>.</u>	17.	. H	ċ	÷,	ċ	٠	÷.	ċ	ċ		∴,	•
AIR VEHICLE AVIONICS	FACIOR	1.Y79=	.000	1	٠	2.3108	•	v	, c	•	• •		2,0682		. ~	. 63	S.	ď	٦.	٦.	٦.	∹	∹	۳.	∹.	•	٦,	٦,	•	•		∵ ⊃.	•	1.9941	<u>ت</u>	•	1.9817	•	1,9740	1.9484	٠	1,9333	• 16.	906	. 915	6.	•	<b>-</b>	2	1.4926
AGGREGATE EXCLUDING	THUE X	CY67±	100.0	1 4	5.64	100.3	<b>~</b> (	p. 101,	10201	100.3	Э С	<b>&gt;</b> (	100.9	, =			104.1	0	106.4	0	0	0	0	0	0	<b>O</b> :	⇒ .	Ξ.		110,0	114.1	-	116,2	116.2	116,3	_	~	~	117.4	118.9	119.6	119.3	121.0	7.7.	5. T.	170.8	151.1	121.3	1.72.3	•
AVIUTICS PRODUCTION	FACTOR	FY 79=	000	1 0	704	•	150	1166-1	136.	1 4007	0.0	100	1.4936	•	1.8677	•	•	1.8526	٠	1.8367	•	•	.810	•	•	1.0037	٠	•	•	•	1.7739		•	•	1.7442	•	•	•		1.700%	1.6935	1.6892	1.678	1,666,2	1.6500	1,6933	1.0540	1.6520	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1.04.1
47101168-1	INDEX	3	٠ ۵		٠			9 6		102.5	, K	9 6	102.7	03.	104.1	104.1	104.7	105.0	105.2	105.9	106.2	106.1	107.4	107.2	106.9	107.8	108,1	108.4	108.7	104.0	109.6	116.4	111.0	110.4	111.5	111.9	112.5	113.6	<b>.</b>	<b>.</b>	<u>.</u>	á,		ای		-	117.5	٠,		
P405UCT 108	FACTOR	F171=	.000	•	•		•	•	•	•	•	٠	2,0969				•	Ç	.240	ď	.207	.18	٠.		٦,	•	~	. 1.5	٠		2.0501	٠.	1.5649	1,9645	1.9598	1.9601	1.9529	1.0460	1.9416	1.3333	1.3321	5	1,9155	٠ :		1064	10	7.15	1	/ (i t, · ·
Politice Page 198	* June *	CY37=	100.0	1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		0.001		1000		10 1 0 C		•	104.0	3	104,4	104.5	105.2	105.3	105.6	105.8	107.1	10H.1	5	108.1	108.4	٠	110.3	110.6	8.011	110.9	115.4	11,4	120.4	17(1,4	129.7	120.7	121.1	121.5	121.8	N	155.4	172.9	125.6	5 t .	1.4.7	124.1	17,1.7			-
AIRERA'S PRODUCTED	FACFER	FY71:	1.0903			700 Y • 4	0.000		200 X = X	50 to	0.0000000000000000000000000000000000000		2.2534	2.447.0	2,2439	2,2498	2.2117	2.14%	2,1507	2.1532	2.1457	2,1431	2,1143	2,1149	2,1093	2,1032	2.1051	2.1068 3.4.50	6270.5	0.000.0	0470.4	8.00.3	2,0037	0.00.5	2.0017	•	1.4343	1.11/1	1.9457	1.95.5	0.43.40	1. 356.1	3.146		11.	1.2.1	e ( , , • ,		- -	•
AIRERATE	Inbt x	CY67:	100.0	1 0	0000	0.00			102.1	102.5	102 5	7 601	101.9	102.4	102,8	182.R	103,9	104.8	106.h	107.0	107.3	107.5	108.9	108,9	109.2	109.2	5°6.01	109.3	7.01.		113.8	114.6	114.9	115.0	115.1	115.4	115.7	115.9	116,1	E. K. I.	118.H	113.0	120.3	170,3	o	119.6	119.8	2.07		
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118.0 1117.0 1117.0 1118.9 1118.9 1119.7	121.1 121.4 122.4 122.1 123.0 123.0	124.1 124.2 125.2 125.0 126.0 127.3	129.0 129.0 129.0 136.4 138.0 135.4 135.4	1	147.40 147.40 149.70 149.70 149.70 149.70 150.70
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1.2448	1.2408	1,2322	1.2203	1,2163	1.2087	1.2005	1,1961	1,1875	1.1790	1,1680	1,1615	1.1527	1.1468	1.1403	1.1384	1.1297	1,1227	1,1167	1.1052	1,1031	1.0971	1.0934	1,0873	1.0765	1.0644	1,0586	1.0453	1.0369	1.0256	1.0174	1,0149	1,0109	1.0053	0.9874	0.9807	1696.0	0.9637	0.9526
183.1	183.7	185,0	186.8	187.4	188.6	189,9	190.6	192.0	193.4	195,2	196,3	197,8	138.8	199,9	200.3	201,8	203,1	204,1	206.3	206.7	207.8	208.5	209.7	211.8	214.2	215.4	218.1	219.9	222.3	224.1	224.6	225.5	226.8	230.9	232.5	235.2	236.6	239.3
1,2421	1.2382	1,2293	1,2169	1,2132	1.2070	1,1994	1,1942	1,1851	1.1764	1,1652	1,1595	1.1502	1.1444	1.1387	1,1392	1.1304	1,1241	1.1191	1.1070	1.1050	1.0986	1.0948	1.0689	1.0783	1.0651	1.0600	1.0457	1.0371	1,0263	1.0176	1.0154	1,0113	1.0052	0.9864	0.9802	0.9687	0.9635	0.9527
186.5	167.1	188.5	190.4	191.0	191,9	193,2	194.0	195.5	137.0	198.8	199.9	201.4	202.5	203,5	203.4	205.0	206.1	207.0	209,3	209,7	210.9	211,6	212.8	214.9	217.5	218,6	221,6	223.4	225.7	227.7	228,2	229,1	230,5	234.9	236.4	239.2	240.5	243.2
1,2745	1.2693	1,2637	1.2555	1,2503	1,2267	1,2124	1,2161	1,2139	1.2000	1.1993	1.1862	1.1804	1,1739	1.1579	1.1290	1,1221	1,1075	1,0909	1.0868	1,0829	1,0821	1.0790	1.0706	1,0581	1.0566	1.0429	1.0407	1,0348	1.0174	1,0151	1,0092	1,0068	1,0067	0,9985	0.9859	0,9766	0,9655	0.9509
1,2,6	153 2	15359	154.9	155.5	158.0	160.4	159.4	160.2	161.0	162.1	163.9	164.7	165.6	167.9	172.2	173,3	175.6	176.2	178.9	179.6	179.1	180.2	181.6	183,8	184.0	186.4	186.3	187.9	191,1	191.5	192,7	193,1	193,1	194.7	197.2	199.1	201.4	204.5
1.2470	1.2300	1.2149	1.2149	1.2100	1,2022	1,1310	1,1334	1,1566	1.1567	1.1460	1.1344	1,1254	1.1244	1.1194	1.1120	1.1104	1.0945	1.1105	1.0361	1,1041	1.1047	1.0980	1.0867	1.0749	1.0468	1.0600	1.0584	1,0592	1,0353	1,0356	1.0290	1,0220	1,0121	0.9907	0.9652	0.9493	0.9411	99344
169.5	197.3	1.44.0	134.7	175,3	190,2	198.6	1.5.4	20%,7	202.7	206.4	208.5	210.2	210.3	211.3	212.7	213.0	215,3	213.0	215.8	214.2	214.1	215.2	217.6	220.0	221.7	223.1	223.4	223,3	224.4	224°4	229.7	231.4	233.7	241.1	245.0	249.1	251.3	253.1
1,2435	1.2407	1.2324	1,217.	1,2139	1.20.35	1.2013	1.1975	1.1907	1.1742	1.1709	1.1658	1.1577	1,1503	1.1445	1.1475	1.1365	1,1514	1.1217	1.1102	1,1052	1.0369	1.0337	1.0495	1.0793	1.0646	1.0401	1.0420	1.0308	1,0237	1.0124	1.0112	1.0031	1.9931	0.2331	9489.0	0.9745	0.9703	0.0593
185.7	185.6	186.9	187.2	189.7	190.6	191.6	192,3	193.4	135.3	136.7	197.4	144.9	2.00	201.2	7.002	202.7	503.5	20%3	207.4	208.4	210.11	210.6	211.4	213.4	216.3	217.3	221.0	723.4	225.0	227.5	227.8	228.5	553.6	233.1	233,9	236.3	237.4	240.3
7	7	7.	11	11	7.7	11	11	11	11	11	11	11	11	11	79	3	~	7.	£	۲,	7	7.	2	1.6	2	æ	1)	2		61	7.9	<u>.</u>	ž.	£	19	7:	13	1,
ž	7.7	;·	ž	ž	ž	11	11	11	11	11	11	11	11	11	11	11	11	£	Ξ	Ŧ	Ξ	7.3	73	7.8	ξ,	Ξ	3.	78	÷	7.	73	44	4.1	4	19	61	45	Ť.
ij	A J.	: :	3	ś	۔ ت	<u>-</u>	-	⊻ <b>∀</b>	A D K	\ \ <b>X</b>	: : :	3	<b>∆</b>	· ·	<u>-</u> 5	705	ت خ	۱۸۲	¥.	ž	A: A	HAY	3	<u>ئ</u> با	A: J:,	35	100	7	ć	141	<u></u>	¥ < ₹	<b>V</b> OIS	¥V¥	ے ت	Ę	Δ.)′,	3

HISTORICAL INFLATION JUANTERY INVICES

	AIRFRANG	ATREMANE IN COLUMN TO A	191 902	PRODUCTION	AVICATES	AVICATES PRODUCTION	AGEST GATE EXCLUDING	AIR VEHICLE AVIORICS	AGGREGALE Including	AIR VEHICLE Avionics
	I mex		× = -	FACTOR	TODEX	FACTOR	1100f x	FACTOR	IMDEX	FACTOR
	$\sim$	1 1 7 1	CY372	FY79=	CY6.7	FY79=	CY67:	F Y 79=	767	F Y 79=
=	ċ	1.0004	100.0	=	100.0	1.0000	100.0	1.0000	100.0	1.0000
;	1 4 4		1	•	i ! :	1 1 1 1	1 1 1 1	1	1 1	1
	100	\$ \$110 °	5.	9998 6	۲.00 t	1.9389	100.1	315	•	2,2717
	102.1		د. 201	7907	101.2	1.9214	102,1	2.2689	•	2.2344
			1.05	20 x 2 x 13 x	0.00	1.8972	102.8	٠.	•	•
i di	7 . V C . V		200	0.070	100.5	1.8787	102.1	2.2564	102.8	2.2183
	0.701	0.50.00				1 8306	104.1	2,1696	104.701	•
	1001	2,1246	101	: -:	106.5	1,0193	108.4	2,1301		2,1066
25.5	109,4	2.1975	109.2	2.1650	107.5	1,8070	109.5	2,1203	109,1	
	110.3	3910.5	110.2	2.1352	106.3	1.7867	110.4	•	110.2	•
	113.6	<b>5.</b> 9282	115.8	2.02%	109.7	1.7718	~	•	113.8	2.0030
	115.0 1.0	47.00 <b>.</b> 2	120.5	1.4531	111.1	1,7499	16.	•	115.7	1.9702
	7.51	1. 0 . I	121.1	•	112.7	1,7259	116.9	1.9826	116.4	1.9577
	117.6	1.9578	122.1	1.9363	114.4	1.6991	118.6	٠	118.2	1.9283
	7° 3	7.5.5	123,6	1016.1	115.9	1.6780	120.7	1,9190	120.2	1.8958
	7 0 7 1	C C C C C C C C C C C C C C C C C C C	200	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	117.0	1.6573	121.0	1.9104	120.6	1.6903
	- 101	1 1 1 1 1	0 10	1. 6. 4. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6. 6.	110.0	1,0192	0.00	1 0003	120.2	
	1001	1 . 11 7 7 7	20.00		117	1.64.1	10000	1 Acs	122.5	٠
	125.0	70 24 5	5 2 4	07.08.1		1,63,40	196 4	1 8340	125.6	1 8144
	1.8.7	1.7.01	\$ 5 E E	1.408.4	120.5	1.6138	129.1	• •	100 m	1.7772
	128,3	1.7852	124.7	1,4372	121.6	1.5904	128.9	1,7975	128.2	1.7786
	153,1	1.7243	136.2	1.6165	122,3	1,5900	132,5	1.7488	131.5	1,7340
1 7.5	1 54.9	(,	151.5	1.7990	125,1	1,5795	134.6	1,7287	132.9	1.7149
	156.0	1.6935	134.1	1,7641	124.1	1.5645	35.	•	134.4	1.6957
	٠ . د	1.633	136.6	1.7520	125.4	1.5439	131.7	1,6831	136.5	1,6702
	1.5.1	1.05.4.1	1 511.7	1.7018	125.	1,5143	141.5	1,6391	140.0	1.6281
	7	1.7.7	a	1.6.6.	3 · 6 · 6	1.5004	145.0	1.5978	143.5	1.5890
	્. કું કું કું કું કું કું કું કું કું કું	£ 5.45	2. To	1,5,77	· · · ·	1.4671	1.0.6	1,5364	149.0	1,5302
	2 ° 2 ° 3 ° 3 ° 3 ° 3 ° 3 ° 3 ° 3 ° 3 °		- C	/ :/ c b • T	136.0	1.42.03	3	1.4624	156.2	1.4595
	- 4					1 25.13	1 0 0 0	1 3745	191	0005.1
	5.0/			1. 7.51.11	) () () () ()	37.7.	20.07	1.346.9	1.00.1	3010
	174.0	12.4.		1.3563	147	1.3184	2.4.1	1.3244	172.2	1.3239
	177.5	2.4 × 4.0	1.00.1	1, 11 7.1	147.3	1.5148	178.1	1.3007	175.1	1,3019
	180.5	1.7.5	7.11	1,2757	149.4	1,2996	181.0	1.2758	178.4	1.2778
	142.4	1500.1	1:3.7	1.275	150.7	1,2361	143.1	1.2655	179,8	1.26.70
	1.,.1	1.257	1 0	1,25/7	1.55,2	1,26.32	187.4	1.2365	184.0	•
	143.2	1,213.	135.6	1,20%	156.3	1.2440	190.3	1.2124	187.6	ď
	1,2,1	1.11.7	#*B66	1,140;	160.2	1,2141	144.2	1.1929	190.0	•
	1.6	1.1724	- · · · · · · · · · · · · · · · · · · ·	1.1:	100	1.1976	4.8.1	1,1663	194,9	1.16%
	7.00.7	1.1	210.6	1.1751	166.1	1.1706	202.5	1.1444	φ.	
	·	1.51.6	7.5.7	5 . 1 . 1	174.7	1.119	#	1,1312	ŭ.	1,1302
	1./=/	_	-	7 = 1 · 1		1.08.9	2000	1.110 \$	205.7	•
			, · · ·	1	7. 0 G.	1.077	211.8	1,0441	208.6	1,072
^ =	7.51%		-		7.64.	1.0525	217.n	1.0670	213.A	1.06.64
		-	•		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				÷	1.0508
	•	- " :				* : E * : :		7.114.	7.4.7	7.00
	•	•	•	•			•	•	0	0,7740

AIRERAER	TREBARE PRODUCER	+ 13.5 E+ E	PROJUCTION	AVIOHES	PRODUCT LOW	AGGREGATE EXCLUDING	AIR VEHICLE AVIONICS	AGGREGATE INCLUDING	AIR VEHICLE AVIONICS
Inth	F At 10.6	× 10,7,1	FACTOR	7417 x	FACTOR	× 51771	FACTOR	Tellite	001.343
(16.75	21774	-111	- F & A 3	-L 7 A. J	L V 70-	10.74	1077	( P \ )	
				-1010	-6-1	- 20-10		-191-	-6114
100	3 H E J .	1.50.	1,000	100.0	1.0000	109.0	1.0000	100.0	1.0000
1 1	1		: ! ! ; ; ;	: : : : : : : : : : : : : : : : : : : :	1 1 1 1 1	: :	1 1 1 1		1 1 1 1 1
101.7	35.26.56	102.5	2,3073	102.6	1.9062	101.9	2.2734	101.9	2,2366
107.1	2.14.01	107.1	2.2076	106.2	1.3303	107.1	2,1629	107.0	2,1299
113.6	2.007	117.3	2,0167	110.6	1,7583	114,4	2,0247	114,0	1,9989
119.5	1.9779	124.5	1,8394	116.4	1.6707	120.6	1,9213	120,2	1.6971
174.4	1.8520	150.0	1.9186	118.9	1,6353	125.6	1,8443	124.9	1.8245
133.2	1.7233	151.1	1.4038	122.6	1.5830	132.7	1,7454	131.8	1.7503
1.4.4.	1.5791	140.5	1,6625	129.0	1,506.9	143.7	1,6123	142.2	1.6027
164.0	1.4045	177.1	1,3738	141.4	1,3751	165.8	1,3974	163.4	1,3955
178.6	1.29 %	1116.3	1,2971	148.9	1.3056	179.4	1,2912	176.4	1.2924
186.1	1.2370	132.0	1,2321	153.2	1,2692	107.4	1,2365	184.0	1.2392
134.7	1.1"21	203.1	1.1645	161.2	1.2061	196.6	1.1786	193.0	1.1809
6.00	1.1024	216.3	1.0934	179.5	1,0835	210.6	1.1004	207.4	1.0989
230.3	1.0000	235.5	1.0000	194.4	1.0000	231.7	1.0000	228.0	1.0000

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### APPENDIX G

Annual Data for The Historical Inflation Program - - Raw Material Portion Only

ERIALS ONLY  ERIALS ONLY  1107.60 107.60 107.60 74.10 70.10 106.70 106.70 106.70 107.90 117.90 111.30 111.40 111.40 111.40 111.40 111.40 111.40 111.40 111.50 112.50 112.50 112.50 112.50 112.50 112.50 112.50 112.50 112.50 113.5	RIALS ONLY  RIALS ONLY  107.60 107.60 107.60 74.10 70.50 122.40 110.50 110.50 110.80 61.79 67.20 117.90 110.50 110.50 110.80 61.79 67.20 117.90 110.50 110.50 110.80 77.79 67.20 108.10 110.50 110.50 110.80 77.79 67.20 108.10 108.70 108.70 108.70 73.90 91.60 101.00 101.40 101.40 101.40 78.50 90.60 97.30 99.40 99.40 99.40 86.10 90.00 99.80 107.40 99.40 99.40 80.10 90.00 99.80 107.40 99.40 107.40 107.80 107.20 107.70 91.00 112.00 119.20 118.20 90.20 110.70 93.40 127.40 110.80 102.20 110.70 93.40 127.40 110.80 172.20 115.70 115.70 149.90 117.80 115.70 115.70 149.90 117.80 115.70 115.70 149.90 117.80 115.70 115.70 145.70 173.10 1175.30 153.50 182.90 166.40 259.10 173.10	RIALS ONLY  RIALS ONLY  107.60 107.60 107.60 74.10 70.50 149.30 140.70 110.80 110.80 111.80 75.00 70.40 108.10 110.80 110.80 111.80 75.00 70.40 108.10 110.8
NLY  NLY  NLY  107,60 74,10  110,80 81,79  111,30 75,90  108,70 73,90  108,70 73,90  108,70 73,90  108,70 73,90  108,70 109,20  108,40 68,10  108,00 109,20  125,40 119,20  125,40 119,20  125,40 119,20  125,40 114,70  125,40 114,70  125,20 149,90  125,20 149,90  155,20 149,90  155,20 149,90  155,20 149,70  155,20 149,90  155,20 149,70  155,20 149,90  155,20 148,70	NLY  NLY  NLY  NLY  107.60 74.19 70.50 122.40  110.80 81.79 87.20 117.90  111.30 75.90 89.40 108.10  108.70 73.90 99.60 97.30  101.90 73.90 99.60 97.30  99.40 88.10 90.00 98.00  99.40 88.10 90.00 98.00  102.90 119.20 112.20 99.00  112.00 119.20 112.20 99.00  125.20 119.20 119.20 192.50  125.20 119.40 119.50 132.50  125.20 149.90 219.60 168.00  150.90 162.90 163.90 219.60 168.00  150.90 162.90 163.90 219.60 168.00  150.90 162.90 163.90 219.60 168.00  150.90 162.90 163.90 219.60 168.00  150.90 162.90 171.60 220  150.90 162.90 171.60  150.90 162.90 171.80	F A R D A T A
74.10 AU. 609 74.10 AU. 609 73.40 73.40 88.10 89.00 1107.20 1118.60 1118.50 1118.50 1118.50 1118.50 1118.50 1118.50 1118.50 118.	74.10 70.50 149.30 40.60 120.40 73.90 73.90 91.60 101.00 73.90 91.60 101.00 73.90 91.60 101.00 73.90 91.60 101.00 91.00	LABOR 74.19 70.50 122.40 99.50 0.0 61.70 67.50 122.40 99.50 0.0 75.00 69.40 108.10 96.20 0.0 75.00 69.40 108.10 96.20 0.0 75.00 90.60 97.30 95.70 0.0 78.50 90.60 97.30 95.10 0.0 78.50 90.60 97.30 95.10 0.0 100.00 100.00 100.00 100.00 0.0 110.00 100.00 100.00 100.00 0.0 110.00 105.20 99.30 99.20 0.0 110.20 115.20 99.50 101.00 0.0 110.50 115.20 99.50 101.00 0.0 110.50 115.20 99.50 101.00 0.0 110.50 115.20 99.50 101.00 0.0 110.50 115.20 99.50 101.00 0.0 110.50 115.20 99.50 101.00 0.0 110.50 115.20 99.50 101.00 0.0 110.50 115.20 107.00 103.40 0.0 144.70 146.20 105.50 115.50 0.0 149.90 219.60 168.80 115.50 0.0 166.40 259.10 170.20 119.50 0.0
	149.30 1122.44 117.30 101.60 97.30 97.30 97.30 90.00 107.00 107.00 107.00 107.00 1171.80 1171.80	LABOR (15) (15) (15) (15) (15) (15) (15) (15)

(18) 00.00 00.00 00.00 00.00 00.00 00.00 00.00

MATERIAL COST DATA

### APPENDIX H

MONTHLY DATA FOR THE HISTORICAL INFLATION PROGRAM - - RAW MATERIAL PORTION ONLY

### MGNTHLY DATA FOR MATERIALS

		7 J 6		89	68	68	9 9 9 9	9 9	68	68	68	68	89	89	63	69	63	60	69	69	69	69	69	6 C	2 2	7.0	2 5	2 6	2 2	7.0	2 ;	2 2	0,	<b>.</b> .	: =	2	: 2	::	7.1	2	: 2	: =	72	22	7
1 1		3725.9	1		•	0.0	•					•	•					•	• •		•	٠	-								•		0.0	•		•	•			•	•			c •	
		3722	1	-																			•				•	•					0.0	•		•	٠			•	٠			•	•
	16		;	c	0	0		0	0	_	0	e,	0	9:	0	· c	0,	<u> </u>		0	<b>-</b>	0	م م	= =	0	0	0 (	<u>ء</u> د	- c	0	٠.	5.0	0.0	0.9		٥.	c. (	90		0	0,0		c	٥	<b>.</b>
BOR	15	6.4	; ; 4	0	٠,	٥,	- C		0	c	٥.	0.	0.	<b>.</b>	. 0		۰.	-			٠.	<i>-</i> .	٠,٠		· ~	0	e (	٥,	20	0	٠,٠	• •		٥,		•	<b>.</b>	20		0	٠.		-	0.	<b>-</b>
V 1	·	4 FC 	1 1 1	90	2.0	00:	) C	06	7.0	0 1	10	0 1	50	0 0	2 2	90	00		2 5	 	0 3	<u>.</u>	<u>ت</u> نور	5 C	, 0	20	0 0	<u>د</u> د	) () T T	20	202	9 0	20 0	000	500	20	96	5 5	30	7.0	0 5	000	2	$\sim$	08
1 1 1	14	Ξ	! ! !	66	99	66	, 5	6	66	66	6	6.6	6	ه ده	י פי	τ.	<b>3</b> (	מ מ	` J	10	10	-	ے 		700	10	101		20	100	100	001		101	101	101	101		2	103	2:	103	103	103	
1	13	11.41	) ) : !	ů.	100,09	000	100.001	100.00		100,00		0.1	O C		. N	99.20	O 1	07.66	່ວ	99.20	2	· •	ο ۰	35.20	١ ٥٠	•	S	ຄີພ	95.50	2	JO U	റഗ	95,50	೧ಚ		ĸ.	ഗ്ര	n =	. ₩	~	<b>~</b> r	- ~	~	103.70	103.70
	12	:		98.30	٦.	5° 26	0.0	, ~ , M	3.2	5.0	5.4	ان ت	<b>⇒</b> :	er a	0.0	₹.		7.3						110.50			•			6.	ი. :	ים י	130,90	•	133,10	•	•	136.00		₹.		140.40	, <del>,</del>	140.40	140.40
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	CY7.44	76,130	1 1 2	TENTAL	76. A 1.15	7	11001	7.4.4	7651	75051	7.41.7 V	U 1716.	7761	77.6	776:	71may	1.011	1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 /		7707	T. Anny	7761	11117	73714.2	744411	۲۰۱۰۸		1.10.1	· ·	1 1 1 1 1	7 11.16	71,001	11.	7 306.7	19M41	7 10:11	7 1411.	<b>3</b> 3816

### APPENDIX I

HISTORICAL INFLATION INDICES :
RAW MATERIAL PORTION ONLY.

HISTOLICAL INFLATION
PRE-1958 INDICES

### RAK MATERIAL PORTION ONLY

ATREBARG	TRERAKS PRODUCTION	Eustet	Eystol PRonucrton	AGGREGATE EXCLUDIA:	ATR VEHICLE AVIONICS
Tuble x	FACTOR	TUDEX	FACTOR	INDEX	FACTOR
C167=	F Y 7 1=	(. f., 7=	FY19::	C 7675	1 Y 79=
100.	1,6003	100.0	1.6400	100.0	1.0000
	1 1 1 1 1	† † ! !	1	: ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	1 1 1
17.0	5.1362	56.2	3,4237	E . 15	5.2449
19.5	2.7774	41.2	3.0444.	24.1	2.4653
19.5	5.7640	41.5	2.4852	(C)	2.8462
y*08	2.5943	45.7	2.1.349	7.52	2.6856
23.1	2,3103	40.7	2.5456	88.88	2,3988
ورح • دو	2,3246	4:1.7	2,5434	28.6	2.4098
23.4	2.2745	50.3	2,4645	D. 600	2.346.7
23.6	7,2557	50.7	2.4452	L. 62	2.3276
25.4	2.1024	54,1	2,2497	31.8	2,1754
27.4	1.9462	58.8	2,1081	4.48	2.0077
27.9	1.9113	0.09	2.0666	35.0	1.9704

HISTORICAL INFLATION FALFNDAR YEAR HUDGES

### RAH MATERIAL PORTION ONLY

Thurstone   Thurstone   Thurstone   Thurstone   Trypa   Tryp	AIPFRAME	APERAM PRODUCTION	Intens	PRODUCTION	AVIUNICS	PRODUCTION	ACCRECATE.	AIR VEHICLE AVIONICS	AGERTGATE INCLUDING	AIR VEHICLE AVIONICS
FY79=	1 TIDE X	FACTOR	X 101:1	FACTOR	TOURX	FACTOR	X JIHI	FAFTER	Tricky	00101
1.0000 1000 1000 1000 1000 1000 1000 10	=1913	F Y 7 J	( Y ., 7=	261.k.d	C 77 7-	F 70+	C 4 2 4 1		4 1/18 Y	111101
1. 1253 54.6 2.2018 31.5 1.3501 32.6 5.6 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7 5.7	5 6.3	COURT !						- 113-	C16/=	FY 79=
2.0002 31.5 1.3307 34.8 2.0302 31.5 1.3307 34.8 32.6 2.0303 30.9 1.3307 33.2 32.6 2.0303 30.9 1.3534 33.2 32.6 2.0303 30.9 1.3534 33.2 2.0304 30.9 1.3534 33.2 2.0304 30.9 1.3534 33.2 2.0304 2.0304 30.9 1.3534 33.2 2.0304 30.9 2.0304 30.9 2.0304 2.0304 2.0304 30.9 2.0304 2.03			a•07	1.000	a. aa.	1.0000	100.0	1.0000	100.0	1.0000
1.4253 59.6 2.6018 31.5 1.5367 34.8 1.000.5 56.3 2.2018 31.5 1.5361 32.6 2.015 31.3 1.3361 32.6 2.016 30.9 1.3531 33.2 2.016 2.1746 30.9 1.3534 33.2 2.016 2.1746 30.9 1.3534 33.2 2.026 2.0274 30.9 1.3509 29.3 2.026.2 2.0274 30.0 1.3509 29.3 20.0 2.0274 30.0 1.3509 29.3 20.0 2.0274 30.0 1.3509 29.3 20.0 2.0274 30.0 1.3509 29.3 20.0 2.0274 30.0 1.3509 29.3 20.0 2.0274 30.0 1.3509 29.3 20.0 2.0274 30.0 1.3509 29.3 20.0 2.0274 30.0 1.3509 29.3 20.0 2.0274 30.0 1.3509 29.3 20.0 2.0274 20.0 2.0274 20.0 2.0274 20.0 2.0274 20.0 2.0274 20.0 2.0274 20.0 20.0 1.0000 20.0 20.	1 1	: : : : : : : : : : : : : : : : : : : :	!!!!!!		: : :	1 1 1 1		* * * * * * *	* * * * * * * * * * * * * * * * * * * *	: :
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2.03.3 57.9 2.1394 30.9 1.3534 33.2 2.1746 30.9 1.3534 33.2 2.1746 30.9 1.3534 33.2 2.1746 30.9 1.3534 33.2 2.1746 30.9 1.3534 33.2 2.1746 30.9 1.3534 33.2 2.1746 30.9 1.3534 33.2 2.1753 49.0 2.3280 30.0 1.3599 20.2 2.280 30.0 1.3599 20.2 2.280 30.0 1.3599 20.2 2.280 30.0 1.3599 20.2 2.280 2.2	E.G.	1,49,60	56.3	2.2018	31.3		7 0 7	3 1101	, ,	0070
2.1702 57.0 2.1334 53.2 52.0 50.9 1.55.3 53.2 53.2 53.2 53.2 52.0 50.9 1.55.3 53.2 53.2 53.2 53.2 53.2 53.2 53.2	26.0	1 20 0	3	3387		1000	20.00	0011-2	05.50	5740.2
2.1746 50.9 1.3554 32.9 1.3554 32.9 2.1746 50.9 1.3554 32.9 31.5 2.2200 30.5 1.3748 31.5 31.5 2.2500 30.5 1.3748 31.5 31.5 2.2500 30.1 1.3579 20.2 2.2580 30.1 1.3579 20.2 2.25274 30.0 1.3579 20.2 2.25274 30.0 1.3579 20.2 2.25274 30.0 1.3579 20.2 2.25274 30.0 1.3579 20.2 2.25274 30.0 1.3579 20.0 2.2507 2.0579 20.0 2.2507 2.0579 20.0 2.2509 2				5.1394	5.00	1.3538	33,2	2.0762	33.0	2,0085
2.1794         55.8         2.2200         30.5         1.3748         31.5           2.7654         55.2         2.3280         30.1         1.3692         30.2           2.7654         49.8         2.4696         30.0         1.3697         20.2           2.7654         49.8         2.5274         30.0         1.3979         29.3           2.7654         49.8         2.5466         30.6         1.3677         29.3           2.775         52.8         31.2         1.3594         30.5           2.775         54.6         31.7         1.3594         30.5           2.057         54.8         31.7         1.3594         31.1           2.057         55.3         1.6979         35.3         1.296.3         35.4           2.057         55.3         1.6979         35.3         1.296.3         35.4           2.057         55.9         1.605.7         35.3         1.296.3         35.4           2.057         4.600         35.3         1.296.3         35.3         1.296.3           2.057         4.600         35.3         1.296.3         35.3         1.196.0           2.057         1.600         35.7 </td <td></td> <td>CHE 1-7</td> <td>D. 7.c</td> <td>2.1746</td> <td>30.9</td> <td>1,3550</td> <td>32.4</td> <td>2,1292</td> <td>32.3</td> <td>2.0545</td>		CHE 1-7	D. 7.c	2.1746	30.9	1,3550	32.4	2,1292	32.3	2.0545
2.256.7 55.2 2.3280 30.1 1.3892 30.2 2.265.2 49.8 2.4896 30.0 1.3979 29.3 20.0 2.26274 30.0 1.3979 29.3 20.0 2.26274 30.0 1.3979 29.3 20.0 2.26274 30.0 1.3607 29.3 20.0 2.26274 30.0 1.3607 29.3 20.0 2.2702 31.5 1.3607 29.6 20.1 2.3007 29.6 20.1 2.3007 20.0 31.5 1.3601 31.1 20.0 2.2808 31.7 1.3202 32.1 20.0 2.0 2.1836 31.7 1.3202 32.1 20.0 2.0 2.1831 32.3 1.2007 35.4 1.2007 20.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.	· ·	2.1799	55. 8	2.2200	30.5	1.3748	31.5	2,1915	31.15	2,1122
2.2652 49.8 2.4896 30.0 1.3979 29.3 49.6 2.2874 30.0 1.3979 29.3 29.3 2.2812 49.0 2.5874 30.0 1.3979 29.3 29.3 2.2812 30.0 1.3807 29.6 2.3466 31.5 1.3807 29.6 2.1857 2.1857 2.18507 29.6 2.1857 2.18507 20.6 21.2 1.3807 20.6 21.1870	1.3.1	6.400.0	5.5.2	2,3280	30.1	1.5892	3,0%	2,2835	2 2 2	2.194.3
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2,0055 b5.9 1,8002 35.6 1,2057 35.3 1 1,954 65.2 1,8725 35.9 1,2734 35.9 1 1,515 62.9 1,4955 35.1 1,1934 45.0 1 1,383 35.7 1,2946 35.4 1,1510 51.7 1 1,252 100.6 1,2319 35.5 1,1469 55.2 1 1,637 11.5 1,914 45.0 1,0476 63.5		0)(0.0)	) · / ·	1.5511	50.00	1.2963	30.4	1,9495	35,1	1.8897
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PRINTER THEATTON

### RAF MATERIAL PORTION ONLY

March   Marc		AIRFRAM	P 31 70 40 40	1110 111	Pika JdCi Lei.	AVTORITES	AV) GHES TRODUCTION	EXCLUDING	C AVIUNICS	INCLUDING	6 AVIOULES
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Color	٦,	= . =	7022.6	4.50	2,5645	51.4	1,5321	30.3	2.2755	30.4	2,1765
Colored State	.74	<b>.</b>	6213.	# : 	4.5643	31.4	1,5334	₽•08 08	2.2755	30.5	2,1766
Colored State   Colored Stat	•	- · ·	611.	# 2 2 2 3	2000 P	\$	1,3561	7 P	2.2703	30.5	2.1741
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1,000   0,01   0,02   0,03		· · ·	Z-1-533		2.2008		1.5307	\$ 0 K	2,2511	7.7	2.1497
Part	•	· ·	2. 1 ASB.	1.0	2,2390	31.4	1,3554	31,1	2,2226	31.1	2,1328
Column   C	•	4,4,5	2.1726	54.5	2,2759	31.3	1,5374	51,2	2,2126	31.2	2.1248
1,450   94,4   2,2799   31,3   1,454   31,2   2,2739   31,2	•	2.5	71117	4. 44	2.2758	31.2	1,5415	51.2	2,2118	51,2	2,1247
2.116.9         54.4         2.27/99         34.5         1.434.0         51.0         2.27/79         34.5         1.434.0         51.0         2.27/79         34.5         2.27/79         34.5         1.434.0         51.0         2.27/79         34.6         2.27/79         34.6         2.27/79         34.7         2.27/79         34.7         2.27/79         34.7         2.27/79         34.7         2.27/79         34.7         2.27/79         34.7         2.27/79         34.1         2.27/79         34.1         2.27/79         34.1         2.27/79         34.1         2.27/79         34.1         2.27/79         34.1         2.27/79         34.1         2.27/79         34.1         2.27/79         34.1         2.27/79         34.1         2.27/79         34.1         34.1         2.27/79         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.1         34.2         34.1         34.2         34.1         34.2         34.2         34.2         34.2         34.2         34.2         34.2         34.2         34.2         34.2         34.		ر. دورون	1.11/30	# <b>*</b> 6Ω	2,2763	31.3	1,5374	31.2	2,2138	31,2	2,1259
Californ		54.5	2.1.14.5	# # # S	66/3.2	31.5	1,5301	31.0	2.2277	31.0	2,1376
C. 1840         59, 6         2,766         31,2         1,542         2,208         31,3         2,208         31,3         2,208         31,3         2,208         31,3         2,208         31,3         2,208         31,3         2,218         31,3         2,218         31,3         2,218         31,3         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         2,218         31,1         31,2         31,2         31,2         31,2         31,2         31,2         31,2         31,3         31,3         31,3         31,4			2.1765	# #G	2.2790	31,2	1,5415	31.1	2.2162	31.2	2,1286
Value		5.5	<.154U	# # # # # # # # # # # # # # # # # # #	2.2784	31.2	1.5428	51.3	2.208.2	31,3	2.1219
Strict   S		/ · h ?		to the	2,2665	51.2	3458	31.3	4,02.2	51,3	2.1186
1,		± .	₹ <b>1</b> 113	+ + t.	2.7766	3.1.5	1,5428	31.1	2.2195	31.1	2,1316
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		ر ا ا	=	ਤ • ਤ : ਤ :	2.2785	51,4	1.5426	51.1	2.2189	31,1	2.1311
Carroll   Carr		5.4.5	2.1761	Ţ.	2.20.97	31.2	1.5415	31.1	2,2713	31,1	2,1330
CARTERS         50.7         Carrents		 	757156	# 1 # 1 2	8602°	31.2	1, 1415	51,1	2,2196	51.1	2.1515
Street		2 ·	0 to 1 ° 2	7,00	3.56.2	 	7 F 1 S 1 F 1	51.5 	2,1861	31,5	2.10%7
Control         Date         Carrest         Strict         Land         Carrest           Control         57.0         2.7167         51.7         1.5015         52.0         2.1168         32.2           Control         57.1         2.7167         51.7         1.5015         52.0         2.1168         32.2           Control         57.2         2.1167         51.7         1.5015         52.0         2.1168         32.5           Control         57.2         2.1167         51.7         1.5016         5.1079         32.5           Control         57.2         2.1167         51.7         1.5011         52.0         2.1168         32.5           Control         57.7         2.1677         51.9         1.511         52.0         2.1049         32.5           Control         57.7         1.511         52.0         2.1049         32.5         33.4         32.5         33.4         32.5         33.4         32.5         33.4         32.5         33.4         32.5         33.4         32.5         33.4         32.5         33.4         32.5         33.4         32.5         33.4         32.5         33.4         32.5         33.4         32.5				0.00			0.000	7.10	Z.1611	91.9	2.4765
Control   Cont			10110		10 To C		1,000	0 ° 0 ° 0 ° 0 ° 0 ° 0 ° 0 ° 0 ° 0 ° 0 °	20172	2 0 8 0 8 0	0.00 c
1,000, 1,000,		3,00	- ( ) - ( )		23127	51.7	1.4215	. *	2,1362	1 C.	9,0562
1,000   1,00			1. ten 1.	2.14	2.101	51.7	1,5215	32.6	2,1148	35.5	2.0410
\$1,00         \$1,00         \$1,00         \$2,1         \$2,10         \$2,5		7,7		64.6	2,1576	51.7	1.3220	37.0	2,1154	32.5	2.0385
1,41.07   10.4.9   2.477.   1.91.47   35.5   35.5   32.5   33.4   1.91.47   1.91.47   35.5   35.4   1.91.47   35.5   35.5   35.4   1.91.47   35.5   35.5   35.4   1.91.47   35.5   35.5   35.4   35.5   35.		8.5. H	5.11.15	2115	2.10.5	51.3	1.35.1	52.1	2.1075	32.6	2.0316
1.0771   bl.   2.0202   35.9   1.5111   55.0   2.0202   35.9   1.5171   55.0   2.0202   35.9   1.5171   55.0   2.0202   35.9   1.5171   55.0   2.0202   35.9   1.5171   55.0   2.0202   35.9   1.5171   55.0   2.0202   35.9   1.5171   55.0   2.0202   35.9   1.5171   55.0   2.0202   35.9   1.5171   55.0   2.0202   34.2   1.5472   34.5		.1.0.1.	1000	5.5.3	2.111.2	4.14	1,5137	37.5	2,17.13	32.5	2.0420
1,5077   01.0   2,0537   57.0   1,5072   55.0   7,0075   35.5   1,511   59.0   7,0075   34.2   1,511   59.0   1,511   59.0   2,0054   34.2   1,5032   51.9   1,511   59.0   1,50427   34.5   1,5042   54.5   1,5042   34.5		51.1	1775	1.1.	2.47.74.5	51.1	1.5111	35.6	2.050.2	33.4	1.985u
1,000   1,00			7/11.	: 1:	2.0537	37.11	1.5072	35.6	\$ 5.50.0	35.5	1,9814
1,000,0   1,00		- - - - -		 	1.11.7	3.16 3.16	1,5111	34.5	5.00.2	χ. Φ <b>Ω</b>	1.9287
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1.00   1.00					7.76.4	31.6		5 · ·	0000	0.45 0.45	1.36.1
1,000   1,00						7	1.20.1		0 10 1 1	7, 4	1,7640
1,000   31.9   1,5137   51.0   1,975   34.6   1   1,000   34.6   1   1,000   34.6   1   1,000   34.6   1   1,000   34.6   1   1,000   34.6   1   1,000   34.6   1   1,000   34.6   1   1,000   34.6   1   1,000   34.6   1   1,000   34.6   1   1,000   34.7   1   1,000   34.7   1   1,000   34.7   1   1,000   34.7   1   1,000   34.7   1   1,000   34.7   1   1,000   34.7   1   1,000   34.7   1   1,000   34.7   1   1,000   34.7   1   1,000   34.7   1   1,000   34.8   1   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,000   1,			•	- 1	17.3		1 41 47	: : : :		6.14	1217
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		• 0			1.5671	\ 6. (6.	1.51.57	, T	. 476.1	9.5	1.9157
					1. 90.1	31.7	0.318.1		1.174.5	Y 75	1.9141
1, 30		\	•	*	92 CH. T	35,1	1,3070		1.97.5	34.6	1.9139
7.10		•	•		1.7.796	32.0	1,305	3 . 3.	3.47.10	34.6	1.9142
		\		•	1.00.76	\$2.1	1,5046	55	1.4704	54.7	1.90A8
	-	•	•	•	13.00	56.1	1.30	4.00	1.17.15	54.1	1.9114
		<del>-</del> ت	•		1, 231	32.4	1.293	30.0	1.975.1	34.7	1.9121
7,1100 1000 1000 3007 1,2020 3041 1,5000 34.9 1		g•14/	<i>i</i>	<b>,</b> ,	1.0014	52.1	1.200.9	24.2	1.3006	34.6	1,9154
		~	~ · · · · ·	•	1.0013	32.7	1.2020	3.1.	1.70%0	34.9	1,9024

1.8699	<b>•</b>	1,8691	1.8688	æ	1.8714	1.6730	.876	679	665	5 6	•	המ	1.000 t	1.9138	1.4176	1.9168	1.9162	1,9159	1,9136	1.9124	•	1.8865	1.8665	1.8558	1,8564	1.8540		~ .		1.8065			1.6469	1.5582	1,5245	1.4572	3,3916	1.303x 1.4656	1.3649	1.3627	1,31%1	1.3287	1.3298	1.3255	1.5172	1.3266	1 3130	1.3197	1.3164	1,3232	1,3241	1.2895	1.2865	1.2405	1.2766
35.1	3 60 60	   	35.5	35.4	55.4	35.4	35.3	35.3	35.5	900	55. A	9 0 0 0 0	0 ° ±	34.0	X 4 7	- 49 - 37 - 18	34.6	34.6	34.7	34.7	35.1	35.2	35.5	35.7	35.7	35.8	36.0	36.1	56.3	36.6	2 6	39.0	40,3	9,54	43.5	45.5	47.6	· · · · ·	2 ° 2 ° 3	48.7	50.4	49.9	6.64	50.0	50.3	50.0	200		. a	50.1	50.1	51.4	51.5	51.8	51.3
1.2504	1,9291	1,9275	. 92	1.9244	1.9296	1.9310	1,9352	1.9581	1.9245	2,100	1,4127	•	1.9710	• •			•	1,9811	1.9792	•	•	٠	1.9270	•	•	•	•	1,6939	•	1.8147	• •	1.7427	1.6858	1,5886	1,5554	=	1014.1	7 7	. 7	3	no.	7	1.344.4	Ξ,	1.5503	1.5403	10001	2 1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cr. 10. 1	1.5356	1.3566	Α.	1.2963	1.400	1.7855
35.4	8.00	35.8	355.8	35.4	35.0	35.7	35.7	9.00	5 ° 1 ' 1 ' 1 ' 1 ' 1 ' 1 ' 1 ' 1 ' 1 ' 1	20.00	35.U	7 C 2 K	) (A)	0 0 0	54.9	8 46	34.8	54.8	34.9	34.9	35.4	35,4	55.0	36.0	36.0	36,1	36.3	36.4	35.1	3/°1	100 mm	9.68	6.011	43.4	ង• ដង	46.6	0 ° 0	0 0 0 0 0	6.64	50.0	6.13	51.4	۳. داري		51.9		3 6 6 6		٠ ٠ ٠	7.15	_	1.3.1	*	•	•
1.2545	1	1.2894	1.2002	1,2932	1.2936	1.245.1	1.2970	1.292.3	1.2857	•	1.2753	•	•	•		1.2602	•	•	1.2832	•	•	•	•	•	•	1,2710	•	•	•	1.2518	•	1,2401	•	•	1.1944	1,1853	1.1672	1.11.34	1.1.592	1.1503	1,1335	1,1363	1.1402	٠. خ	┈,	1.1.90		-	1.16.72	, –	=	÷	-	1,1'5'1	1.15.70
38.1	32.4	32.1	32.5	36.4	32.4	32.3	32.5	~ · · · ·	36.5	( · · ·	0 % 0 % 0 % 0 %	35.7	200	, , , , , , , , , , , , , , , , , , ,	36.5	32.5	32.5	32.5	32.6	32.6	32,7	32.4	52.9	52.9	6.00	75.7	0,70	000		0 4°0 8'8'0 8'8'0	5 KO	33,3	34.1	34 . 5	35,1	35.3	(1,25)	30.6	5 E	30.4	36.9	36.4	36.7	St. 1	35.4		* * 5° * *	0 to 10 to 1	*	36.0	3. 4.1	36.1	36.	 	51.4.V
1.71.59	1.6540	1.00030	1.030	1.0055	1.44954	1.000	1.1127	1.9169	1 2466	2001	1.7354	1.4250	1.9350	1.9481	1.9479	1.9402	1.9482	1.9480	1.9461	1.9459	1,9065	1,9062	1.8629	1.0009	1.8509	7640*T	5 p t 2 c .	1.0306	1.6320	# # # # # # # # # # # # # # # # # # #	1.7952	1.7559	1.6.941	1,5328	1,4986	1.447	1.5568	1.4359	1.3350	1,5237	1,2541	1.20.59	¥ 3 × ₹ ₹ ₹ ₹ ₹ ₹ ₹ ₹ ₹ ₹ ₹ ₹ ₹ ₹ ₹ ₹ ₹ ₹	2072.1	7.789	2005.T	301.5	200.2	1.306	1,5207	1.3239	1,25.61	0 St & 7	٠,	1.5
7. ° 4.	¿ y	6.11.7	1.3.7	3. u.e.	6.0 a.C	٠ ٠ ٠	T .	۳. ۱ د د د	\ • F :	• • • • • • • • • • • • • • • • • • •		5 25	# # C		63.6	63.6	65.6	63.6	63.7	63.7	65.0	ے ہے۔ دور	•					N = 1	F 1 C	0 tr	64.0	71.5	75.1	6.08	82.7	N5.6	Cy d	F 4 60	۳ / د د	94.6	95.4	#* OE	3. 0.	**************************************		V					1.06			·.	·• -
-	्	7. F194	. (a) • (a)	7,14.14	2,(21%	# 1	1000	^ - -	0.101.5	C400.0	: ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	2,6911	5.6023	2.0010	1.946.1	.2.0451	9400*2	2.0037	2.0017	1.9995	1.98.7	3K/5•1	13/51	7 1 C 1 C 1	1.4616	1 50000	•	•	•	1.8340	1.6953	1.7405	1.6503	1.6244	1.5920	4204.T	55554 F		1.0 (75	1.4.7.3	1.3447	1.1.		1.4737	5 / 1 / 1 · 1	\$ 1.55 E					1.74	1.50.44	1984. • H	- -	
4.6.4	26.4	50.4	. 26.4	4.45	# S	<b>26.3</b>	0.47	7 ° 4 7 ° 6 ° 6 ° 6 ° 6 ° 6 ° 6 ° 6 ° 6 ° 6 °	26.5	26.5	26.7	26.7	26.6	76.1	76.7	96,6	26.K	24.6	26.6	26.7	5 ° 6	0.15		9.60	200	, r , r	67.43	0.70	2 2 2 2	E 60	ι. Β.	30.1,	31.7	32.E	υ. (3)	ران د ، د ،	. c	× 2.	37.6	17.5	36.5	ال الله الراب	ר. י		2 0 0 K	- AK	1.68	19.8	3.1.6	3°1.	39.2	40.1	 O	ت ت ت	
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	_			ニナ		ACA.			NAME OF THE PERSON OF THE PERS													\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			200						11 11 11		A1.12 74				S. T. 25			חינ ל		0 2 3 4		3.4			A'J6 75					1 IVD			

1.2635	1.2525	1.2482	1,2271	1,2026	1.2014	1,2021	1,2030	1,1935	1.1849	1,1715	1,1562	1.1417	1,1382	1,1235	1,1217	1,1263	1,1252	1,1226	1,1226	1,1241	1,1176	1.1049	1,1042	1.0979	1.0901	1,0803	1.0671	1,0673	1.0676	1,0637	1.0552	1.0465	1.0361	1.0256	0.9680	0.9683	0.9574	0.9465	h0+6*0	0.9341
52.5	52.9	53.2	54.0	55,1	55.2	55.2	55,1	55,6	55° A	56.6	57.4	58.1	58.3	59.0	59.1	58.9	58.9	59.1	59,1	59.0	59,3	60.09	60.1	#*05	60.8	61.4	62.1	62.1	62.1	62.3	62.8	63.4	64.0	64.7	67.1	60.5	69.3	70.1	3.07	71.0
1.2715	1,2599	1,2552	1,2326	1.2065	1.2054	1.2064	1.2083	1,1982	1.1934	1,1748	1,1588	1.1435	1,1595	1,1257	1,1219	1.1279	1,1271	1.1247	1,1245	1,1281	1,1213	1.1083	1,1072	1,1009	1.0930	1.0027	1.0685	1.0689	1,0701	1.0666	1.0574	1.0484	1.0377	1.0267	0.9871	0.9663	0.9553	4446.0	0.9386	0.9330
54.3	54.8	55.0	56.0	51.5	57.3	2.18	57.1	57.0	57.8	58.8	55.6	tı • 0·9	9.09	61,4	61.5	61.2	61.2	61.4	61.4	61.2	61.6	62.3	62,3	62.7	63.2	63.8	9.49	9.49	64.5	64.7	65.3	65,8	66.5	67.2	6.69	71.4	72.3	73.1	73.5	74.0
1.1560	1,1520	1.1520	1.1510	1,1430	1,1441	1.14.1	1,1402	1,1276	1,1247	1.1247	1,1190	1,1130	1,1131	1,1200	1,1190	1,1033	1,0978	1.0924	1.0942	1.0647	1,0661	1.0568	1,0610	. 1,0551	1.0484	1,0460	1.0468	1,0451	1.0346	1,0226	1.0226	1,0195	1,0133	1,0094	1,0018	0.9988	0.3384	0.9190	0. 3668	0.9503
36.∂	36.4	36.4	36.4	30.5	34.6	36 . 7	36.1	37.1	37.2	37.2	37.4	37.4	37.5	37.4	37.4	36.0	34.1	38.3	38,5	36.5	39.5	39.6	39.5	39.7	39.9	40.0	40.0	40.1	40.5	6.04	6*0#	41.1	41.3	41.5	£. C.	43.	42.4	42.9	43.3	4.4.1
1.2529	1.5516	1,2472	1,2149	1,2010	1.2000	1,2005	1.7007	1.1746	1,1672	1,1362	1.1349	1,1005	1.0921	1,0837	1.0835	1.0315	1,0913	1.0969	1.0969	1.1129	1,1119	1.1124	1.1185	1.1094	1.0974	1.0037	1.0750	1.0779	1,0959	1.0832	1.0713	1.0569	1.0450	1.9354	0.9997	9406.0	0.9445	0.9257	1916.0	0.9167
5° 1.	0.1.	n. ( f.	10,,,0	<b>₹.</b>	145.2	145.2	105.2	105.5	105.2	10.3,1	107.2	112.0	115,5	114.3	114.4	113,5	113.6	114.0	115.0	111.4	111,5	111,4	116.0	111.7	112.9	117.4	115,3	113,0	114,3	114.4	115.7	117.2	116.6	119.7	124.0	126.5	131.2	1.5.5.9	154.7	134.9
1.5000	1.50.2	1,000	1.044.	1.1.7	10 to 6 1	1.0104	1.2134	1.2.144	1.:115	1,2019	1.1755	1.175.	1.1734	1.1520	1.144.3	1.1555	1.1522	1.1453	1.1457	1.15.44	1.1275	1,1957	1.0999	1,0953	1.000	1.0423	1.04.42	1.06.50	1.9411	1,6559	1.04.74	1.0429	1.0330	1.0210	0. 1730	47.00.11	1590*(	9.4572	4.7.17	11631.03
41.5	42.1	42.3	6.21	4.1.1	44.1	44.1	5 t t	43.9	0 * † †	<b>a</b> 55	45.4	45.5	45,5	46.3	46.4	46.2	46.5	46.6	9.94	4.5.4	47.3	40.2	8°8	44.7	40.9	49.5	50.1	50.5	50.3	50.5	50.3	51.1	51.ń	52.5	54.5	55.1	55.4	55.7	96.0	9.99
<b>.</b>	÷	7	~	7	11	11	۲,	11	11	11	11	11	~	11	22	11		ž			-		•															61		
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MISTORICAL TRELATION SUSPENSION INDICES

RAW MATERIAL PORTION ONLY

	Sed PSVBHILL	he IJ Surf ad	t parage	Fibration Trops	8 31 :3: (AV	AVJerates productives	AGGPL CATE	AIR VEHICLE AVIUNICS	AGURE BATE INCLUDING	AIR VEHICLE Avionies
	TOTAL X	FACLES	< = · 1	FAL 101,	TOUR	FAC LOR	1 थान ४	LACTOR	114D£ X	FAC TUR
	C 16.7	1111:	CYSTS	F1 / 1=	CY67-	FY 79 -	CY6.7::	1 Y 79=	CY6.7=	F Y 79:
TE C	100.0	1. J. M. G.	1.00.1	1.0.00	100.	1,0000	100.0	1.0000	100.0	1.0000
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•	I • • • • • • • • • • • • • • • • • • •		#	5 30 4 S	31° t	1,5379	# 0 c	2.2752	30.5	2.1764
• •	5 u	#1 1 ° '	= ~	C96.2.2	51.5	1.55e3	5°08	2.6364	50.9	2.1452
	٠,٠		0 = = = = = = = = = = = = = = = = = = =	1970 V	31.5	1,5574	51°.	2.2192	>1·1	2.1307
: :	\		·	2,2751	51.5	1.5426	4.15	2,2107	41.5	2,1240
-	5 de 2	2,1733	(	2,2450	31,2	1,3419	31,1	2.2199	31.1	2,1316
7.	25.0	2,1528	7.11.	2.223A	31.4	1,3316	31.8	2,1680	31.8	2,0853
e e	32,65	1000°2	4.5.6	2,1970	31.7	1,3215	32.4	2,1327	32,3	2.0531
· · ·	भ <b>ै</b> दे	2.67.11	1.75	2,1762	31.7	1,3193	32.6	2,1149	32.5	2,0373
÷	55.9	2.05.50	62.0	1,9995	32.0	1,3098	53.9	2,0372	55.7	1,9681
2	26.1	00#4*8	63.1	1,9032	31.7	1,3215	34.8	1.9455	34.5	1.9227
2:	٠٠٠ ال	7.0.4 7.0.4	(, s, 1	1.9030	51.7	1.5224	0 e n n	1.9766	34.6	1,916/
£ .		\$ 0.00 m	7° C .	# N. T. O		1,3136	30.0	1 47740	0.4.0	1 9115
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	# G	5,1700	7 7 9	1,000,4	3.00	1,2903	1	1.9281	. 16° 16° 18°	1.8697
7	25.4	- 1 c 0 - <		1.8079	38.3	1.2953	35.7	1,9319	35.4	1.8738
~~	#. 92	2,014,	6.13	1,4939	32,5	1,2899	35.8	1,9271	35,5	1,8688
? ?	20.0	61UU*2	67.5	1,4369	32.7	1.2320	55.7	1.9327	35.4	1.8726
	7. 4.	€ (. 44.4 s)	63.3	1.4403	32.1	1.2024	34.9	1,976.5	34.7	1.9110
1.7	9.6.€	2,64143	9.50	1.9481	32.5	1,2678	34.8	1,9815	34.6	1,9163
1 7 4	7.6.4	3676°L	64.1	1.9527	32.6	1,2828	35.0	1.9694	34.8	1.9050
£ :	27.1	1.4702	ر د ده د ده	1.0720	37.3	1,2746	35.8	1.9505	35,5	1.8695
5.	* · / ·	1,57.55		1.44.51	52.)	1.2710	36.1	1,9100	35.8	71.8.1
Σ;	24.0	₩505 <b>*1</b>	67.4	1. 53 5 11 P	53,1	1,2645	56.7	1.4785	નું . જુ	1.6226
•	62	1. 1.		1.77.85	\$ 000 P	1, 1, 1	- 3 E C S	1. (C.)	- 5.6	1.7364
₹ :	7.70	- XO-1-1				0117*1	- · ·	10001	- c	1.0749
	**.''C		* C	7070 4 -	0 v	1.1057	\ c 0 0 7	1.38.0	) ( ) ( ) ( ) (	1,350
					5 ° 46	1.1366		1.3394		1.3245
. i.	, W.	11.4714	\ \ \ \ \	20 m2 1	34. 1.	1,1474	51.6	1,3369	50.1	1,3231
3 75	5.68	1.5/10/	9354	3666.1	36.2	1,1555	6.13	1.32 44	50.4	1.3169
·.'	٠,65	1.4.4	S • ##	1.5142	36.0	1,1645	# <b>.</b> [-	1.3333	50.2	1.3212
× .	° 0 n	1.5.1	1.4.7	1.2555	36.1	1.1596	8°55 3°	1.2950	51.6	1.2855
÷ :	ر. د د		วา (ป ราการ สารา	7757.T	36.3	1.1550	54.54 	1.2722	2	1.25541
27	1 7 7 7			1 0002		1 1401	6.7.3	1.2067	55.1	1.2024
			0.00	1.1.91	37.2	1.1257	5.05	1.1887	56.0	1,1846
7	# C #	1.1711	111.	1.1039	37. +	1,1197	\ 0:3	1.1472	57.9	1,1453
11.	146.5			20.01	31	1.1140	- T	1,1245	0,63	1.1239
1.1	16.00 J	1.1	\. 	1.9330	30.5	1,0948	61,3	1,1254	59.0	1,1234
<u>ج</u>	47.5	1.1237	111.4	1.1124	3.9.4	1.0638	61.7	1.1192	₽•65	1,1155
Ξ.	1.01	1.1.1.1	111.	1.1099	39.7	1,0548	6.2 . 7	1.1004	<b>60.4</b>	1.0974
	49.9	1 1	114.	1.0704	0 ° 0 h	0400	6.4.3	1,0733	61.9	1.0716
: Z	ະ. ຄະ	1.1.1	11.	1.17.04	z . t. <del>z</del>	1.32.0	1.4 . t.	1.0547	•	1.0622
1 7 ,	7.1.			1.11.1	41.4	1,0140	Ç. ya	1.0375	64.0	1.0360
7	6.66	-	1 7	1	46.1	0, 19.3	7.17	9.90 pt	58.3	7
3 /-	. T.		-	1 1	u * 2 ts	10 A Provide	75	0.9337	د.07	0 <del>1</del> 6 •

HISTORY AT INFLATION FISCAL YEAR INDICES

## RAH KATLUSAL PORTION ONLY

AIRFRAME	LIRERAME PRODUCTION	ENGINE	PRODUCT FOR	AVIORICS	FRODUCTION	AGGREGATE Exce UD Bas	AIR VEHICLE AVIONICS	AGC OF GATE.	AIR VEHICLS ALFONICS
I NOE Y	FACTOR	INDEX	FACTOR	INIT	FACTOR	INDEX	FAC TOR	INDEX	FACTUR
CY67=	FY78=	CY67=	FY78=	CYEVE	FY78-	CY675	f Y 78=	C767=	FY78:
100.0	1.0000	100,0	1.0000	100.0	1.0000	100.0	1,0000	100.0	1.0000
1 4 7	1 1 1		t = t + t = 1			1 1 1		: 1	1 1 1
24.3	1.9784	53.8	2.0921	31.3	1.2553	30,9	2.0224	30.9	1.9447
24.9	1,9333	55.2	2.0380	31.4	1.2533	31,6	1,9739	31,6	1.9024
26.0	1,8522	62.3	1.8051	31.8	1,2381	34.1	1,8330	37.8	1.7772
26.2	1,8341	66.1	1.7018	32.2	1.2205	35.1	1,7787	34.8	1.727
26.5	1,8191	68,3	1.6461	32,5	1,2109	35.8	1.7457	35.4	1,6967
26.8	1.7977	t . 4.9	1.7459	52.7	1.2039	35,1	1,7766	34.9	1.7230
29.4	1.6349	70.8	1.5900	53.F	1.1722	38.6	1,6166	38.1	1.5775
37.9	1.2710	95,9	1.1976	56.4	1,0811	56.3	1,2405	6.84	1,2287
40.5	1,1961	96.8	1,1619	36.1	1.0860	52,8	1,1822	51.1	1.1755
43.0	1,1185	101,5	1.1083	56.4	1.0804	56.0	1.1144	54.1	1.1121
44.0	1.0723	109,0	1,0323	87.2	1.0566	59.1	1,0559	56.9	1.0560
4.8.1	1.0000	112.5	0000	K. 08	1,0000	4.0.4	1.0000	£0.4	1.0000

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